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A  
**COMPARATIVE GRAMMAR**  
OF THE  
**INDO-GERMANIC LANGUAGES.**

**Da muss sich manches Rätsel lösen  
Doch manches Rätsel knüpft sich auch.**

*Goethe, Faust.*

A  
**COMPARATIVE GRAMMAR**  
OF THE  
**INDO-GERMANIC LANGUAGES.**

A CONCISE EXPOSITION  
OF THE HISTORY  
OF SANSKRIT, OLD IRANIAN (AVESTIC AND OLD PERSIAN), OLD ARMENIAN,  
GREEK, LATIN, UMBRO-SAMNITIC, OLD IRISH, GOTHIC, OLD HIGH GERMAN,  
LITHUANIAN AND OLD CHURCH SLAVONIC

BY  
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PROFESSOR OF COMPARATIVE PHILOLOGY IN THE UNIVERSITY OF LEIPZIG.

VOLUME IV.  
MORPHOLOGY, PART III:  
VERBS: FORMATION OF THE STEM, AND INFLEXION OR CONJUGATION.

TRANSLATED FROM THE GERMAN

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TO

**JOHN PEILE,**

**DOCTOR OF LETTERS, MASTER OF CHRIST'S COLLEGE, THE FOUNDER OF THE  
STUDY OF COMPARATIVE PHILOLOGY IN CAMBRIDGE**

**THIS TRANSLATION IS DEDICATED**

**IN TOKEN OF THEIR GRATITUDE AND AFFECTION**

**BY**

**HIS OLD PUPILS.**



## AUTHOR'S PREFACE.

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When in 1889 I brought out the part of my work containing the account of Noun Morphology, I had in my mind, and partly on paper, a simpler plan for the remainder of the work than that which the reader has before him. I meant it to include the presentation of the forms of declension and conjugation, and little more. In view of the confusion and uncertainty that reigned in this department, where many questions of origin and history seemed utterly unsettled, I then thought it best to restrict the work to these limits; and I only hoped that perhaps after the lapse of years, if a second edition should be called for, the further developement of a science which had already made such rapid progress would have put me in a position to give a practical and useful history of Noun and Verb Inflexion. But in the course of my work I was gradually converted from this pessimism; the difficulties no longer seemed insurmountable; and I at length decided to attempt a more complete account, not merely exhibiting the results of the different developements, but even now as far as possible tracing their course. Thus the work grew; and thus it comes about that the size of the latter part is so greatly out of proportion to that of the former.

In giving up my first plan, I was influenced not a little by my belief, that from a comprehensive work such as this,

a work in which it is sought to present the facts and problems of language in connected form, more might reasonably be expected than what I had at first proposed. A student might fairly ask that the many questions which await an answer should not be simply avoided, but that some honest attempt should be made to advance a step towards their answering. It must surely be useful that he should not only read that which can be called certain, not only be taught well established facts, but that he should at the same time find the various problems and puzzles, with which the study of Indo-Germanic inflexion abounds, at least briefly mentioned and conveniently arranged. So will the scholar guard best against the mistake which not the best scholar is wholly free from, the danger that in trying to bring order and light into his palace of knowledge, he may leave some dark riddle unattempted, and only move it from one corner to another. If amidst these shifting theories I have often taken a decided stand, and declared myself for one or other of them, adding therewithal other and many new views and explanations, I am yet far from believing that I have placed beyond all doubt the view which I have preferred. In these matters to indicate a path for future research or simply to establish a *prima facie* case is far harder than most people think; and many a theory which seemed to be fixt on the firmest foundation and to offer no point to attack, has been broken down in the end. I can only hope that the mistakes which these volumes must inevitably contain, may help to supply the means for their own correction.

A few of my readers perhaps may wonder why certain new and some very recent theories upon Ablaut, proethnic Accent, formation of Roots and Suffixes, and other such matters, have in these last volumes been either altogether disregarded or only just glanced at. A good deal of the most recent work I would indeed have included in this last volume

but that it had to be finished in 1891.<sup>1)</sup> In other cases I saw before me hypotheses, which attractive as they are, and fruitful as they may prove to be, at the time of their publication were too slightly worked out by their authors, and had been too little tested to allow of my making them the basis of my own account. In this volume I have practically not touched the newest theories of Ablaut; I confess that I approach the glib and symmetrical systems of Ablaut Series (cp. Bartholomae in Bezenberger's Beiträge, xvii 105) with very little confidence, and I must refer to what is said on this matter in Vol. I § 309. Even a question of Verb Morphology so important as the form of proethnic Roots (whether they were monosyllabic or not) I have left on one side; I believe neither the one thing nor the other, but only that in the present state of our knowledge we can know nothing about it. If in spite of this I have used hyphens freely, I would remind the reader that the hyphen means a real point of composition in such words as Διόσ-κouroi, τοῦ-το, ἀνα-βάλλω, ἔ-φερον, but in ἄγ-ο-μεν or γέρ-ο-μεν it only shows the etymological and morphological likeness of certain elements. And though I now as ever call -ο- in ἄγ-ο-μεν a suffix, I do not thereby commit myself to the statement that such elements were originally independent words. See I § 14 pp. 16 ff., II § 8 pp. 18 ff.

Whether in all these things I have been so happy as to hit the golden mean, scholars must decide. Bearing in mind

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1) Since then I have had to do without any systematic examination and use of the new works which keep streaming in, or my book would never have come to an end. Only now and then have even the more important works been used, such as those of Bartholomae, Bechtel, Buck, Johansson, G. Meyer, Per Persson, von Planta, W. Schulze, Streitberg, and others; Streitberg's work Zur Germanischen Sprachgeschichte first reached me (in proof sheets) after my book was in print as far as the Additions and Corrections; in these I was able to make reference to it. However, I was glad to observe that I am in agreement with many others in matters not a few.

the paramount object of this work, I would rather be blamed for giving too little space to the newest speculations than give any reason for the reproach that I have allowed them too much.

A word is necessary as to the principle on which the labours of my fellow-workers have been cited or not cited in the text. Complaints have not been wanting that in giving various theories and views I have not always given the name of him who first suggested them, or mentioned others who before me had thought of much the same thing. My principle has been as a rule not to mention the originator of each view, or all those who *ante me mea scripsere*, except in such cases as Verner's Law, which I mention under his name. My book does not in the least aspire to be a compendious history of the new school of philology, or to display the part each of us has taken in the gathering of the spoil. Where reference is made in the text to the works of other scholars, this is done for practical ends and no other.

In these last two volumes I have had from Thurneysen the same generous and ready help as before in all that refers to Keltic. Here, as before, the reference to his advice in a few special paragraphs does not in any degree express my obligation to his aid. If the treatment of Irish questions (for I have rarely touched on the British dialects) is at all on a level with recent research, and sometimes even carried beyond it, this is due to Thurneysen. But I must again beg that he be not held responsible for any errors I may have made in using his communications, or for anything but the paragraphs in which his own words are given. I have also to thank Hübschmann for a number of communications on Armenian.

In the text a number of corrections (mostly in unimportant details) have been silently made, which I have received from

reviews and from private letters of fellow-scholars,<sup>1)</sup> among whom I would specially name Messrs. Conway, Holthausen, Leskien, Leumann, Osthoff, and Rouse. More detailed additions which should bring the first parts of the work up to date, I am obliged to forego, since thanks to the rapid progress of our science, whole paragraphs and pages would have to be remodelled. Naturally enough I am now in a position to improve upon many of the views I formerly exprest, particularly in the Phonology (Vol. I) publisht six years ago. Some of these I have expressly corrected, some tacitly. The reader should therefore consult in each case the explanation which I have given latest.

LEIPZIG, July 2. 1892.

K. BRUGMANN.

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1) Lith. *galù* ('I can') and the like forms are not misprints or oversights; see I § 26 p. 29. To avoid misunderstanding, I again call attention to the fact that while *for* (Ger. *aus*) denotes a regular phonetic connexion, *instead of* (Ger. *für*), denotes analogical substitution. Thus "*φιλούμεν* for *φιλιόμεν*", but "Att. *δαίμοσι* instead of pr. Gr. *\*δαίμα-σι*".

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## TRANSLATOR'S PREFACE.

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The list of Additions and Corrections given in the concluding part of the German edition have been here put in their proper place in the text. Some few alterations have also been made, with Prof. Brugmann's sanction, by way of making clear what from its terseness might have been misunderstood. A list of misprints is given, but I fear there must be others; I hope that these will be forgiven, in view of the exceeding difficulty of correcting proof with so many different diacritic marks.

It may be well to point out that the word "Reduplicator" has been used as equivalent to Reduplicating Syllable or Syllable of Reduplication; and that "Phrase" has been extended to apply to a short complete sentence which fuses into a single word, as *ferē-bam*, *dātāsmi* (see page 444).

In this volume as before I have to thank Mr. Conway for valuable help.

The Indices are nearly ready, and it is hoped they may be publisht along with this volume, or at least with small delay thereafter.

CHELTENHAM, July 17. 1894.

W. H. D. ROUSE.

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## CORRECTIONS AND ADDITIONS.

### VOLUME I.

*page 530 line 20 read in cases where the.*

" " " 24 " an acute.

### VOLUME II.

*page X line 1 read masculine.*

" XI " 3 *infra* read And instead of But.

" 23 read Classes instead of Classe.

" 95 " 9 *infra* read Lett. instead of Lat.

" 98 " 18 " " ποδ-ην-εκ-ής instead of ποδ-εν-εκ-ής.

" 99 " 8 " " by dissimilation.

" 111 " 14 *supra* " yugām instead of jugām.

" 114 " 4 *infra* place a full stop after 'one-eyed'.

" 117 " 16 read ('free') instead of ('fre')e.

" " " 18 " priya-tvā-m instead of -tvā-m.

" 119 " 7 " O.Icel. " " O.C.Sl.

" 133 " 5 " paoriya " " pavriya.

" 164 *infra* read saya-mna- instead of saya-mna.

" 166 " " mād-s.

" 168 line 11 read -ē instead of nē.

" 173 " 2 " ὀδυρε-μό-ς instead of ὀδυρε-μό-ς.

" 175 lines 7, 12, 28, 33

" 187 " 7, 23

" 189 line 2 *inf.* } read O.Sax. instead of A.S.

" 209 " 4

" 179 " 1 read of instead of o-.

" " " 2 " ya-tard- instead of ya-taraf.

" 188 " 3 " weather " " wather.

" 208 " 5 " A.S. " " O.Sax.

" 210 *inf.* " it should " " itl shoud.

" 213 line 6 " § 62 " " § 61.

" 221 " 16 " mṛ-tā-m " " mṛ-lō-m.

" 231 " 22 " prīvā-tu-s amā-tu-s instead of prīvā-tu-sa mā-tu-s.

" 232 " 16 " dele stop after civitatem.

" " " 5 *inf.* put a stop after 221.

" 240 " 2 read -τῆτος instead of τῆτος.

- page 249 line 14 *inf.* read *θαῦμα* instead of *θαῦμα*.  
 " 253 " 5 read classification.  
 " 268 " 9 " There " " These.  
 " 272 " 2 *inf.* " 257 " " 267.  
 " 277 " 4 " " would " " whould.  
 " 290 " 5 " " ἰδ-ει-ς " " ἰδ-ει-ς.  
 " 291 " 8 insert stop after above.  
 " 292 " 11 *inf.* read neck instead of neek.  
 " 296 " 3 " datŕ instead of doŕ.  
 " " 10 " siú-ti " " šiú-ti.  
 " 347 " 17 *inf.* " -ειν " " -ειν- and -ην instead of ην.  
 " 349 " 19 read ἀγῆ-ών instead of ἀγῆ-ών.  
 " 428 " 3 *infra* read statements.  
 " 434 " 2 " " line.

## VOLUME III.

- page VII line 8 *inf.* read be instead of by.  
 " 57 " 3 read of sound " " sound of.

## VOLUME IV.

- page 7 line 9 *inf.* prefix § 463.  
 " 10 prefix § 464.  
 " 17, § 472 *Remark, add:* Further, it is assumed by Johansson (Bezz. Beitr. XIII 125) that *at* in Gothic perfects like *rai-rōþ sai-sō* is a long (open) *ē*. But the change which he assumes seems to me insufficiently supported.  
 " 28 line 13 *infra, add:* The *ēs* of the comedians is perhaps better read *ess*, corresponding with the forms *terr* and *ferr* (page 501 footnote 1).  
 " 78 " 5 " " *νυδ-ο-* instead of *νυδ-ό-*.  
 " 81 " 16 " " measuredst instead of measurest.  
 " 83 " 3 read -bō.  
 " 95 " 2 " didst accuse instead of pullest.  
 " " 2 *inf.* read say " " I say.  
 " 96 " 2 " " *blet-e-tū*, omitting \*.  
 " 98 " 8 " " *Skr. da-thá* instead of O.H.G.  
 " 106 footnote 1 *inf.* read *αἰδέομαι* " " αἰδέομαι.  
 " 162 line 12 " " vol. I p. 410 footnote.  
 " " 4 " " I § 404. 2 p. 299.  
 " 198, title to Class XXI, read -eso- instead of -eso-.  
 " 235 line 3 *inf.* in the text, read *biñ* " " *bin*.  
 " 398 " 7 read *νό-ναυ-ῖ-ti* instead of -tiv.

## MORPHOLOGY OF VERBS.

### FORMATION OF THE STEM, AND INFLEXION OR CONJUGATION.<sup>1)</sup>

§ 460. Two kinds of words go to make up a verbal system. On the one hand there are the forms of the Indicative, Conjunctive, Injunctive, Optative (or Precative), and Imperative; those, that is, which belong to what is called the

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1) General Works on the Verb in Indo-Germanic. Bopp, *Vergl. Gram.*, II<sup>s</sup> §§ 426 ff. pp. 255 ff., III §§ 672 ff. pp. 1 ff. Schleicher, *Compendium*<sup>4</sup> pp. 644 ff. Fr. Müller, *Grundr. der Sprachw.*, III pp. 580 ff. Bopp, *Über das Conjugationssystem der Sanskritsprache in Vergleichung mit jenem der griech., lat., pers. und german. Sprachen*, 1816. W. Wackernagel, *Über Conjugation und Wortbildung durch Ablaut im Deutsch., Griech. und Lat.*, Seebode und Jahn's Jahrb., Supplementband I (1831) pp. 17 ff. F. Graefe, *Das Sanskrit-Verbum im Vergleich mit dem griech. und lat., aus dem Gesichtspunkte der class. Philologie*, St. Petersburg, 1836. A. Kuhn, *De conjugatione in -μ. linguae Sanscritae ratione habita*, Berlin 1837. C. W. Bock, *Analysis verbi oder Nachweis der Entstehung der Formen des Zeitwortes namentlich im Griech., Sanskr., Lat. und Türk.*, Berlin 1845. M. Rapp, *Der Verbal-Organismus der indisch-europäischen Sprachen*, 3 vols., 1859 (I. Das ind., das pers., und das slaw. Verbum; II. Das griech. und das roman. Verbum; III. Das goth., das skand., und das sächs. Verbum). Fr. Müller, *Der Verbal Ausdruck im Ärisch-semitischen Sprachkreise*, Vienna 1858. Stenzler, *Über die verschiedenen Conjugationen etc.* (see footnote to page 52, vol. III). Schleicher, *Die Unterscheidung von Nomen und Verbum in der lautlichen Form*, 1865. Ascoli, *Studj ärio-semitici*, Articolo secondo, letto alla Classe di lettere, etc. [del R. Istituto Lombardo], Milan 1865; treats of the Idg. verb as affecting the question how the Idg. languages are related to the Semitic. Merguet, *Welche Beweiskraft hat das Verbum possum für die Entstehung der Verbalendungen aus Hilfsverben*, Gumbinnen 1869. *Idem*, *Die Ableitung der*

Finite Verb. The other class consists of verbal nouns; the forms of the Infinitive (including the Supine), Gerund, and Participle (including the Gerundive). The last class is called the Verb Infinitive.

Verbalendungen aus Hilfsverben, Berlin 1871. *Idem*, Die Hilfsverba als Flexionsendungen, Fleckeisens Jahrb. 1874 pp. 145 ff. *Idem*, Bemerkungen zur lat. Formenbildung, Kuhn's Zeitschr. xxii 141 ff. Pauli, Die Ableitung der Verbalendungen aus Hilfsverben, *ibid.* xx 321 ff. Leo Meyer, Über Vocalsteigerung, insbes. in der Verbalflexion, *ibid.* xxi 341 ff. Westphal, Das indogerm. Verbum nebst einer Übersicht der einz. idg. Sprachen und ihrer Lautverhältnisse, 1873. A. Kerber, Gedanken über die Entwicklung der Conjugation; Erstes Heft: Einleitung, Präsens, Rathenow 1873. Grottemeyer, Üb. die Verwandtschaft der idg. und semit. Sprachen, part 3: Das Verbum, Kempen 1876 (compare part. 4, *ibid.* 1877). W. Scherer, Zur Gesch. der deutschen Sprache<sup>2</sup> pp. 212 ff. The Author, Das verbale Suffix *ā* im Idg., die griech. Passivaoriste und die sogen. äolische Flexion der verba contracta, Morphol. Unters. i 1 ff. J. Schrammen, Über die Bedeutung der Formen des Verbum, Heiligenstadt 1884. Moulton, Notes in Verbal Morphology, Amer. Journ. Phil. x 280 ff. H. D. Müller, Zur Entwicklungsgeschichte des idg. Verbalbaues, 1890.

Aryan. Bartholomae, Zur [ar.] Verbalflexion, Ar. Forsch. ii 61 ff. *Idem*, Zur [ar.] Verballehre, in 'Beiträge zur Flexionslehre der idg. Sprachen', 1888, pp. 1 ff (= Kuhn's Zeitschr. xxiv 271 ff.). Whitney, Sanskrit Gramm. pp. 200 ff. *Idem*, The System of the Sanskrit Verba, Proceedings of the Americ. Philol. Assoc., 1876, pp. 6 ff. *Idem*, Sanskrit Roots and Verb-forms (Supplement to Skr. Gr.) 1885. Delbrück, Das altind. Verbum aus den Hymnen des Rigveda seinem Baue nach dargestellt, 1874. J. Avery, Contributions to the History of Verb-Inflection in Sanskrit, Journ. Amer. Orient. Soc., x 217 ff. Neisser, Zur ved. Verballehre, Bezzenberger's Beitr. vii 211 ff. Bartholomae, Handb. der altiran. Dialekte pp. 113 ff. *Idem*, Das altiran. Verbum in Formenlehre und Syntax dargestellt, 1878. Spiegel, Gramm. der altbaktr. Sprache pp. 205 ff. *Idem*, Die altpers. Keilinschr.<sup>2</sup> pp. 184 ff. *Idem*, Der Organismus des neupers. Verbums, Kuhn-Schleicher's Beitr. ii 464 ff. H. A. Barb, Der Organismus des pers. Verbums, Vienna 1860. Fr. Müller, Die Conjugation des neupers. Verbums, sprachvergleichend dargestellt, Vienna 1864. *Idem*, Die Conjugation des avghanischen Verbums, sprachvergleichend dargestellt, Vienna 1867. *Idem*, Die Grundzüge der Konjugation des ossetischen Verbums, Vienna 1864. Salemann, Versuch über die Conjugation im Ossetischen, Kuhn-Schleicher's Beitr. viii 48 ff.

Armenian. Fr. Müller, Beiträge zur Conjugation des armen. Verbums, Vienna 1863 (see the same scholar's Armeniaca II, Vienna 1870, pp. 1 ff.).

§ 461. The forms of the Finite Verb grew out of the connexion of subject and predicate. In the parent language, phrases made up of a word denoting some condition or action and a personal pronoun, used as a sentence in which the latter was subject and the former predicate, coalesced, and became a

Greek und Latin. V. Henry, *Précis de grammaire comparée du grec et du latin*<sup>2</sup>, pp. 264 ff. King and Cookson, *The Principles of Sound and Inflection as illustrated in the Greek and Latin Languages*, pp. 373 ff. G. Curtius, *Die Bildung der Tempora und Modi im Griech. und Lat., sprachvergleichend dargestellt*, 1846. Landvoigt, *Die Formen des griech. und lat. Verbums untereinander verglichen*, Merseburg 1847. Birkenstamm, *Über die lat. Conjugation in Vergleichung mit der griech.*, Rinteln 1869. Fröhde, *Zur griech. und lat. Conjugation*, Bezzenberger's Beitr. ix 107 ff.

Greek. Kühner, *Ausführl. Gramm. der griech. Spr.*, 1<sup>2</sup> pp. 490 ff. G. Meyer, *Greek Gramm.*<sup>2</sup> pp. 402 ff. The Author, *Greek Gramm.* (I. Müller's Handb. der klass. Altertumswiss., 11<sup>2</sup>) pp. 144 ff. Pezzi, *La lingua greca antica* pp. 216 ff. Monro, *A Grammar of the Homeric Dialect* pp. 1 ff. Lobeck, *Rhematicon, sive verborum Graecorum et nominum verbalium technologia*, 1846. Curtius, *Das Verbum der griech. Sprache, seinem Baue nach dargestellt*, 1<sup>2</sup> 1877, 11<sup>2</sup> 1880. Ahrens, *Über die Conjugation auf  $\mu$  im Homerischen Dialekte*, Nordhausen 1838. L. Junius, *On the Evolution of the Greek Verb from Primary Elements*, London 1843. A. Haacke, *Die Flexion des griech. Verbums in der att. und gemeinen Prosa*, Nordhausen 1850. Inama, *Osservazioni sulla teoria della conjugazione greca*, *Rivista di filol.* i 149 ff. Fick, *Zum Aorist- und Perfectablaut im Griech.*, Bezzenberger's Beiträge iv 167 ff. Bloomfield, *The 'Ablaut' of Greek Roots which show variation between  $e$  and  $o$* , *Amer. Journ. Phil.* i 281 ff. J. Wackernagel, *Der griech. Verbalaccent*, Kuhn's Zeitschr. xxiii 457 ff. Vogrinz, *Beiträge zur Formenlehre des griech. Verbums*, 1886. Von der Pfordten, *Zur Geschichte der griech. Denominativa*, 1886. Johansson, *De derivatis verbis contractis linguae Graecae*, Upsala, 1886. Lautensach, *Verballexion der att. Inschriften*, Gotha 1887. G. Mekler, *Beiträge zur Bildung des griech. Verbums* (1. *Verba contracta mit langem Themenvokal*, 2. *die Flexion des activen Plusquamperfects*), Dorpat 1887. G. Traut, *Lexicon über die Formen der griech. Verba*, 1867. Veitch, *Greek Verbs Irregular and Defective, their forms, meaning, and quantity, embracing all the tenses used by the Greek writers, with references to the passages in which they are found*, new ed., Oxford 1887. A. A. Σακελλάριος *Ἀνώμαλα καὶ ἑλλειπῆ ἑήματα περὶ τῶν συγγραφῶν καὶ ποιητῶν τῆς Ἑλληνικῆς γλώσσης*, 5<sup>th</sup> ed., Athens 1877. C. Thiemann, *Homerisches Verballexicon*, 1879. Frohwein, *Verbum Homericum, die homer. Verbalformen zusammengestellt*, 1881. Γ. Ζηκέδης *Δεξιῶν ἀπάντων τῶν ἐρημάτων τῆς Ἀττικῆς διαλέτου, μερίχον καὶ τύπους ἐξ*

single word; this is the origin of all the finite \*verb-forms. The pronouns which specified the persons of whom the predication was made (it is these which we call the personal endings of the verb) always come second in these combinations; as in

Ἀπαιτῶν περιγραφῶν κτλ., Athen 1888. A. Hogue, The Irregular Verbs of Attic Prose, their forms, prominent meanings, and important compounds, Boston 1869.

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Keltic. Zeuss-Ebel, Gramm. Celt. pp. 410 ff. Windisch, Die ir. Auslautgesetze, Paul-Braune's Beitr. iv pp. 204 ff. Lottner, Die altir. Verbalclassen, Kuhn-Schleicher's Beitr. II 322 ff. Stokes, Bemerkungen über das altir. Verbum, *ibid.* III 47 ff., VI 459 ff., VII 1 ff. *Idem*, The Old-Irish Verb Substantive. Kuhn's Zeitschr. xxviii 55 ff. Ebel, Celtische Studien: Aus der Konjugation, Kuhn-Schleicher's Beitr. III 257 ff., Das Verbum, *ibid.* v 1 ff. Zimmer, Keltische Studien, Kuhn's Zeitschr. xxviii 313 ff. (Das sog. *t*-Futurum); 328 ff. (Das sog. *b*-Präteritum); 335 ff. (Das sogen. *u*-Imperf.); 342 ff. (Deponentiale Coniunctivformen auf *-ra*); 348 ff. (3. sing. praet. pass. auf *-as*); 352 ff. (3. plur. praet. pass. auf *-ait*); 363 ff. (3. sing. praet. auf *-ta*, *-tha*); xxx 112 ff. (Die Schicksale des idg. *s*-Aorists im Ir. und die Entstehung des kelt. *s*-Präteritums); 198 ff. (Das sogen. *t*-Präteritum der kelt. Sprachen). Loth, Essai sur le verbe néoceltique en irlandais ancien et dans les dialectes modernes, son caractère, ses transformations, Paris 1882. Ebel, De verbi Britannici futuro et coniunctivo, Schneidemühl 1866. Stokes, Die mittelbretonischen unregelmässigen Verba, Kuhn-Schleicher's Beitr. v 306 ff. Loth, L'optatif, les temps secondaires dans les dialectes britanniques, Mém. de la soc. de lingu.

\**ei-mi* (= Skr. *ē-mi* Gr. *ελ-μι*), which consists of  $\sqrt{ei}$ - 'go' and -*mi*, a pronoun connected with Skr. *mā* Gr. *μὲ* 'me' (it will appear by and by that the -*i* of -*mi* originally was no part of

v 133 ff. Ernault, *Études bretonnes*, vi: La conjugaison personnelle et le verbe 'avoir', Rev. Celt. ix 245 ff.; vii: Sur l'analogie dans la conjugaison, *ibid.* xi 94 ff. Nettlau, Observations on the Welsh Verbs, Y Cymmrodor ix pp. 56 ff. Rhys, Notes etc., Revue Celt. vi 14 ff.

Germanic. Grimm, Deutsche Gramm. I<sup>2</sup> (1870) pp. 754 ff. Kluge, Noreen, Behaghel, J. te Winkel, Siebs, Paul's Grundr. i 369 ff., 509 ff., 592 ff., 663 ff., 749 ff. Braune, Got. Gramm.<sup>3</sup> pp. 66 ff. *Idem*, Althochd. Gramm. pp. 209 ff. Ch. S. Th. Berndt, Die doppel-form. Zeitwörter d. deutsch. Sprache mit Zuziehung der verwandten Sprachen, Aix and Leipzig 1837. H. Schweizer, Die zwei Hauptklassen der unregelmässigen Verba im Deutschen, Höfer's Zeitschr. für die Wissensch. der Spr. iii 74 ff. Ch. W. M. Grein, Ablaut, Reduplication und secundäre Wurzeln der starken Verba im Deutschen, 1862. Braune, Üb. den grammatischen Wechsel in der deutsch. Verbalflexion, Paul-Braune's Beitr. 1513 ff. Kluge, Beiträge zur Geschichte der germ. Conjugation (Quellen und Forschungen xxxii), 1879. Grein, Das got. Verbum in sprachvergleichender Hinsicht, 1872. C. H. F. Walter, Die starke Conjugation im Tatian, 1868. J. Kelle, Otfrid's Verbalflexion ausführlich erläutert, Zeitschr. f. deutsch. Altert. xii 1 ff. *Idem*, Verbum und Nomen in Notker's Boethius, Sitzungsber. der Wiener Ak., cix (1885) pp. 229 ff. *Idem*, Verbum und Nomen in Notker's Aristoteles, Zeitschr. für deutsche Phil., xviii 342 ff. *Idem*, Verbum und Nomen in Notker's Capella, Zeitschr. für deutsch. Altert. xxx 295 ff. C. Günther, Die Verba im Altostfries., 1880.

Balto-Slavonic. A. Ludwig, Der Infinitiv im Veda, mit einer Systematik des lit. und slav. Verbs, 1871. Schleicher, Lit. Gramm. pp. 221 ff. Kurschat, Gramm. der littau. Spr. pp. 270 ff. Bezzenger, Beiträge zur Gesch. der lit. Spr. pp. 192 ff. Miklosich, Vergl. Gramm. der slav. Spr. iii<sup>2</sup> 62 ff. Leskien, Handbuch der altbulg. Spr.<sup>2</sup> pp. 99 ff. Miklosich, Lehre von der Conjugation im Altaloven., Denkschriften der Wiener Akad., i (1850) pp. 167 ff. P. Pfuhl, De verborum Slavicorum natura et potestate, Dresd. 1857. Miklosich, Beiträge zur altaloven. Gramm. (part. praet. act. I; part. praes. act. auf *ę* statt auf *y*; Aorist; die Personalsuffixe des Dualis; Imperativ), Vienna 1875. Leskien, Die Präsensbildungen des Slav. und ihr Verhältniss zum Infinitivstamm, Archiv für slav. Philol. v 497 ff. O. Wiedemann, Beiträge zur altbulg. Conjugation, St. Petersburg 1886. A. Kalina, Przyczynek do historyi konjugacyi słowiańskiej, Warsaw 1889.

Works dealing specially with the formation of Tense or Mood, or of Persons, and so forth, will be cited below in their proper place.



the first personal pronoun). Personal endings make the chief difference between Verbs and Nouns or Pronouns.

But it would be a mistake to explain all the Indo-Germanic personal endings which we find actually used as being without exception personal pronouns. Once the Verb was created by aid of real personal pronouns, forms of different origin might be associated with it, and used as though they had a personal pronoun tacked on to the end. In this way, to take an example, the Latin participial form *legi-minī* = Gr. *λεγόμενοι -μεναι* was associated with the indicative *legor* etc. (see II § 71 p. 165); and the Romans felt no difference between *-minī* and *-mur* or *-ntur*. Again, many different languages employ infinitive forms, which are cases of *nomina actionis*, as imperatives used of a particular person. In the same way it is probable that some of the personal endings which have come down from the parent language were not really personal pronouns to begin with.

Another point is to be noticed. There are some forms without any personal ending at all which have been used like genuine verbal forms from the parent language onwards. The 2<sup>nd</sup> sing. imperative pr. Idg. *\*bhere* (= Skr. *bhāra* Gr. *φ'ρε* etc.) is simply the present stem. It must be a survival from the time when tense-stems could be used as independent words. Undoubtedly *\*bhere* had at first a wider use, which narrowed by degrees to the use which it must have had ever since the end of the proethnic period. In the end, the form was quite clearly marked off from all others of its verbal system by the absence of any inflexion, in the same way as the voc. *ἦννε* or the nom. *χώρα* were distinguished from all other of their associated cases (see III § 186 pp. 62, 63).

Remark. Although personal endings were a *sine qua non* for the use of a verb form as an ordinary sentence (except *\*bhere* and a few others like it), or as a copula in a sentence, still a sentence could exist without them. At all periods, the Indo-Germanic languages have used sentences that had no finite verb at all. See Paul, *Principien* pp. 99 ff.

§ 462. The Verb Infinite consisted of noun forms, chiefly *nomina agentis* or *actionis*. The difference between these and nouns in the ordinary sense is that these share in certain verbal peculiarities; they have tense, they distinguish between momentary, continuous, or inceptive actions, they have voice, and can govern nouns. The participles were already a large and ramifying group in the parent language; and time has brought about no important change in them. But most of the forms classed as infinitives have arisen since the proethnic period came to an end.

The distinction between the finite verb and the verb infinite is not always kept; for, as we saw in § 461, forms of the latter kind sometimes came to be used in the same way as forms with genuine personal endings. Nor is a line always drawn between the verb infinite and nouns; this we saw in vol. II § 144 pp. 456 f., and § 156 pp. 470 f.

The forms of the Verb Infinite have been discussed under the head of Stem-Formation and Inflexion, so far at least as concerns their formative and inflexional suffixes. We have now to examine the points which mark them as members of a verbal system, connecting, for example, *λείπων* with *λείπω*, *λιπών* with *ἔλιπον*, *λείψων* with *λείψω*. But for convenience' sake verbal nouns will be only cited now and then while we deal with the various groups of the verb infinite, and the whole of them will be afterwards collected and examined in detail.

Verbal Compounds, such as would be formed by joining a real verb-stem to a form of the finite verb, and would answer to O.Pers. *hama-pita* = Gr. *ὁμο-πάτωρ* among noun compounds, never existed as a distinct category, either in the later stages of the parent language, or since. The only exceptions are reduplicated verb forms such as Skr. *dār-darti* 'he bursts, breaks to pieces', so far as these can rightly be called compounds (§ 464). We must however not forget that the reduplication of uninflected "roots" was certainly older, on

the whole, than the fusion of roots with personal pronouns into verbal forms.

Whether the tense sign *-s-* in Gr. *δείκ-σω* *ἔ-δεικ-σα* etc. was the verb subst. *es-*; whether *-dh-* in Skr. *śā-dhati* Gr. *ἔσθω* (*✓ed-*) *ἔ-σχε-θον* O.C.Sl. *i-da* etc. is the verb *dhē-* 'τιθέναι'; and whether these originally acted as auxiliaries, are questions which must be left alone. Even if this be the truth about them, they must have sunk to the level of inflexions long before the end of the proethnic period, and they could no longer be the type for compounds consisting of verb + verb.

Nor do we find in the periods for which there is direct evidence either noun stems compounded with genuine verb forms, or genuine verbal stems compounded with nouns. We cannot class under the second head words like Gr. *ἀρχέ-κακος* (from *ἄρχω*), *ἐπιχαυρέ-κακος* (from *ἐπιχαίρω*), *Στήσ-αγόρης* (from *ἰ-σσησα*), H.G. *wetz-stein* 'whetstone' *melk-fass* 'milkpail' (from *wetze*, *melke*). These are due merely to a perversion or interpretative corruption, and the imitation of older compounds which had a noun stem for the first member. They are not real compounds of a verbal stem with a noun. See II § 30 pp. 51 ff., § 41 pp. 74 f., § 47 p. 86.<sup>1)</sup>

Forms of the finite verb are clearly seen in composition only in the following classes of words; and here too one of the two parts has usually sunk to a kind of suffix or prefix.

1. A Verb form is compounded with Adverbial words; as Gr. *ἄν-εἰμι* Lat. *ab-eo*, Lat. *ne-scio*, pr. Idg. *\*é-dḡkom* = Gr. *ἔ-δοακον* (I regard the augment as a temporal particle); Pruss. *quoitt-lai* 'he may wish, he might wish', pr. Idg. *\*bhéret-u* Skr. *bhārat-u*, — and also *-i* in *\*bhéret-i* *\*bhéres-i* (beside *\*bhéret* *\*bhéres*) was probably a demonstrative particle.

1) There is a new essay by W. Christ, *Abhängigkeitskomposita des Griechischen*, *Berichte der k. bayer. Akad.*, 1890 pp. 187 ff. I cannot agree with the theory for which Christ takes up the cudgels again (pp. 184 ff.), that *Ἀγέ-λαος* arose from the imperative phrase *ἄγε λίσσιν*, and that *ἀρχέ-δέωρος* came from *ἀρχε-δέωρος*; by phonetic change of *e* to *i*.

2. A Verb form is compounded with a Case, being itself the final member of the compound. The case, at the time of combination, was either a living case, or some kind of infinitive. Examples: Skr. *dātāsmi* (periphrastic future) for *dātāsmi* 'dator sum', Lat. *possum* for *potis sum*, *vēnun-do vēnum-do pessun-do*, Lat. *arē-bam arē-facio* O.C.Sl. *nesē-achu* (III § 275 p. 177), Fr. *aimerai* (O.Fr. *amerai*) for *amāre habeo*, Lith. opt. 1<sup>st</sup> pl. *sùktum-bime*, etc.

The line between these two classes is not absolutely fixed, as we see from such words as Skr. *astam-ēti* 'goes down' (of the sun), which has for its first part *āsta-m* 'to one's house, home'.

Remark. There is no class of Verbal Compounds answering to Class I of Noun Compounds (*ὁμο-πάτωρ*), which might have been a model for later formations. It seems therefore best not to give a special chapter to Verb Compounds, as was done to Nouns, but to describe the various kinds in the place they most naturally come, along with the Tenses, the Personal Endings, or as it may be.

One point, however, should be touched on here. It is a matter of wider interest, and well illustrates an important principle of word-formation. When a sentence becomes a single word, it may be treated like a simple word, and it may be inflected or otherwise modified just as the simple word can. Lith. *dū-k* 'give' *ei-k* 'go' (both imperative), consisting of the 2<sup>nd</sup> sing. *\*dū* (cp. Lat. *ce-do*) and *\*ei* + the particle *-k*, are the foundation for a 2<sup>nd</sup> pl. *dūkite*, *ēkite* etc.; and again *ei-ksz* 'come here', which itself is *ei-k* + *szē* 'here', produced *ei-ksz-te*. Pruss. *quoiti-lai* 'he might wish' (*lai* = O.C.Sl. *li* 'vel, aut') suggested the 2<sup>nd</sup> sing. *quoiti-lai-si* and 2<sup>nd</sup> pl. *quoitilai-ti*. Slav. *daj-mi* and Mod. Gr. *δός-μου* 'give me' produced the 2<sup>nd</sup> pl. *daj-mi-te* and *δός-ουο-τε*. Of the same kind were Gr. 3<sup>rd</sup> pl. *ἀγίτω-ν ἀγίτω-σαν* (2<sup>nd</sup> sing. *ἰλθτω-ς* Hesych). Lat. 2<sup>nd</sup> pl. *agitō-te*, since Idg. *\*age-tōd* was a compound of the imperative *\*age* with the adv. (abl.) *\*tōd* 'thence, then'. Also, according to Osthoff and Bugge, Gr. *δεδώκαμεν δεδώκατε*; they explain *δεδώκε* as *\*δεδω* = Skr. *dada(u)* + the particle *se* = Lat. *ce* in *cedo*. Analogous forms of nouns or pronouns are: Gr. *οὗτο-ς*; *αὐτή* acc. *τούτο-ν* Boeot. *οὗτο-ν* etc., formed from the nom. *\*oū-to* *\*aū-to*, whose second part was a particle (cf. O.C.Sl. *kū-to* 'who'), see II § 4 p. 9, III § 415 p. 337; Mid. Ir. instr. pl. *donafi-b* built up on O.Ir. *donai-b-(h)i*, see footnote on page 357; O.H.G. gen. *deses* dat. *desemo* following *de-se* 'this' with the particle *se*, see III § 414 pp. 335 f.; Skr. dat. *asmā-bhyam* Lesb. nom. *ἄμμε-ς* following acc. *\*us-me* (Lesb. *ἄμμε*) with the particle *sme*, see § 436 pp. 367 f., § 443 p. 379; Pol. gen. sing. *sztukamięsy* following nom. *sztukamięsa* 'a piece of meat', where *mięsa* is the gen. of *mięso*.

## REDUPLICATED VERB-FORMS.

Reduplication, the repetition of a word or other element of speech with the same grammatical force, to express that an action or state is repeated, or to intensify it, is certainly older than the modes of forming cases or parts of the finite verb which we actually see in use. It had at first no special connexion with either verbs or nouns, but was used with both; verb types such as Skr. *dár-dar-ti* 'it bursts, breaks up' *da-dhṛṣ-imá* 'we have ventured' *ci-kit-é* 'he knows', and noun types like Skr. *dar-dar-a-s* 'broken' *da-dhṛṣ-á-s* 'venturesome, bold' *ci-kit* 'knowing' may have been formed quite independently of each other. Compare II § 6 pp. 12 ff., § 51 ff. pp. 94 ff. 1)

Root reduplication in verbs came to be very important, and this very early in the history of the parent language, because it was turned to account in the formation of tenses.

1) Works on Reduplication in general have been cited in the footnote to vol. II page 12. On Verbal Reduplication see the following. A. Williams, On Verb-Reduplication as a Means of Expressing Completed Action, Transactions of the Amer. Phil. Assoc., 1875 pp. 54 ff. Pauli, Das praeteritum reduplicatum der idg. Sprachen und der deutsche Ablaut, Kuhn's Zeitschr. XII 50 ff. Osthoff, Zur Geschichte des Perfects, pp. 264 ff. and *passim*. — Ernault, Du parfait en grec et en latin, pp. 1 ff. — Ebel, Reduplicierte Aoriste im Griech., Kuhn's Zeitschr. II 46 ff. — Von der Pfordten, Zur Gesch. des griech. Perf., pp. 42 ff. — Deecke, De reduplicato linguae Latinae praeterito, Lips. 1869. — Stokes, Reduplication im altir. Verbum, Kuhn-Schleicher's Beitr. II 396 ff. Windisch, Das reduplicierte Perfectum im Ir., Kuhn's Zeitschr. XXIII 201 ff. — A. Moller, Die reduplicierenden Verba im Deutschen als abgeleitete Verba, eine etymologische Untersuchung, Potsdam 1866. Scherer, Die reduplicierten Praeterita, Zeitschr. f. österr. Gymn. XXIV 295 ff., and Zeitschr. f. deutsch. Altert. XIX 154 ff., 390 ff. Sievers, Die reduplicierten Präterita, Paul-Braune's Beitr. I 504 ff. Pokorny, Über die redupl. Praet. der germ. Sprachen und ihre Umwandlung in ablautende, Landskron 1874. Holthausen, Die reduplicierenden Verba im Germ., Kuhn's Zeitschr. XXVII 618 ff. Hoffory, Die reduplicierten Praeterita im Altnord., *ibid.* 593 ff. — See also the works cited under the head of Tense-stems.

It was used to distinguish various kinds of action, and also the time at which the action took place. For these purposes Reduplication was very widely used, not only in the parent language but in most of its offshoots far on into the historical period. The wide use of verbal reduplication gave great impulse to similar reduplication in nouns. Noun-reduplication was at first a principle not very active or far-reaching; but thus reinforced it lasted much longer than it would have done, and in later times, under the influence of reduplicated forms in the verb infinite, reduplicated noun-forms appeared again where the proethnic reduplicated type had lost all its reproductive power. Examples are Gr. *κεκραγ-μός* (Eur.) *κέκραγ-μα* (Aristoph.) 'cry, outcry', *κεκραάκ-της* 'one who cries aloud' (Aristoph.) beside *κε-κραγ-ώς* *κέ-κραγ-α*, *πεποιθ-ησις* 'trust' (Josephus, Philo) beside *πε-ποιθ-ώς* *πέ-ποιθ-α*, Mod.H.G. *zitterig* 'tremulous' beside *zittere* 'I tremble' = pr. Germ. *\*ti-trō-mi*.

§ 465. The following Idg. types may be distinguished, according to the form of the reduplication:

I. Root-syllable and reduplication-syllable show the same vowel, or two ablaut-grades of the same vowel.

a. The Root begins and ends in a consonant, and the syllable of reduplication, or Reduplicator, ends in a consonant which is taken from the final of the Root (we count as consonants the second part of the diphthongs *ai au* and so forth). Of this there are three varieties; the first being a fairly exact reduplication, the second replacing a liquid by a nasal in the reduplicator, and the third inserting *ř*.

1. Aryan. Sanskrit *bad-badhē* 3<sup>rd</sup> sing. of *bādh-* 'press'. *dār-dar-ṣi* 2<sup>nd</sup> sing. of *dar-* (*√der-*) 'split, break', *tar-tūr-ya-ntē* 3<sup>rd</sup> pl. of *tar-* (*√ter-*) 'pass over', *vār-vrt-ati* 3<sup>rd</sup> pl. of *vart-* (*√vert-*) 'vertere', *mar-mṛj-yā-tē* 3<sup>rd</sup> sing. of *marj-* (*√merḡ-*) 'wipe'. *jan-ghan-ti* 3<sup>rd</sup> sing. of *han-* (*√ghen-*) 'strike, kill', *nam-namī-ti* 3<sup>rd</sup> sing. of *nam-* (*√nem-*) 'bend', *dān-daś-ana-s* partic. of *dāś-* (*√daś-ñk-*) 'bite', *jan-jabh-yā-tē* 3<sup>rd</sup> sing. of *jambh-* (*√ḡembh-*) 'snap'. *vē-vē-ti* 3<sup>rd</sup> sing. of *vī-* 'appetere', *vē-vī-ya-tē* 3<sup>rd</sup> sing. of *vī-* 'flutter', *nē-nik-tē* 3<sup>rd</sup>

sing. of *nij-* (✓ *neig-*) 'wash'. *nō-nu-mas* 1<sup>st</sup> pl. of *nu-* 'cry out', *cō-škū-yá-tē* 3<sup>rd</sup> sing. of *sku-* 'cover', *śō-śuc-āna-s* partic. of *śuc-* 'light, brighten', *a-nō-nud-ya-nta* 3<sup>rd</sup> pl. of *nud-* 'push'. Avestic *car\*-ker\*-mahī* 1<sup>st</sup> pl. of *kar-* 'think of' (Skr. imper. *ca-kr-dhi*). *daē-dōiš-t* 3<sup>rd</sup> sing. of *dis-* (✓ *deik-*) 'show' (Skr. 3<sup>rd</sup> sing. *dē-diś-tē*). *zao-zao-mī* 1<sup>st</sup> sing. of *zu-* 'call' (Skr. *jō-havi-mi*).

Greek *πορ-φύρ-ω* 'I move restlessly' for *\*-φνρ-ιω*: cp. Skr. *jár-bhūrī-ti* 'moves convulsively, throbs, palpitates'. *μορ-μβρω* 'I roar, murmur' for *\*-μνρ-ιω*: cp. Lat. *murmurāre*, O.H.G. *murmurōn* (§ 595). *γαρ-γαίρ-ω* 'I swarm' for *\*-γαρ-ιω* (*γάργαρα* neut. pl. 'swarm'). *γαγ-γαίνειν* 'τὸ μετὰ γέλωτος προσπαίζειν' Hesych. (Schmidt conjectures *γαγγανεύειν*): cp. O.C.Sl. *ga-gnaja* 'I murmur, growl' (adj. *gagnivŭ*). *παμ-φαίνω* 'I shine clearly' for *\*-φαν-ιω*, Epic partic. *παμφανόων*; the root was *bhā-*, and the nasal of the verb was therefore a present-suffix, see §§ 601, 611. *ἄττω* Hom. *ἀίσσω* 'rush, run at something' i. e. *\*fai-fix-ιω* (I § 96 p. 90, § 131 pp. 119 f.) may be connected with Skr. *vē-vij-yá-tē* (*vij-* 'quicken, burst out') by assuming an Idg. *ua<sup>2</sup>iq-ua<sup>2</sup>ig-* (cp. I § 469. 7 p. 346).

Remark. The origin of *ai* and *oi* is obscure in the reduplicating syllable of the following words: *μαι-μάω*, *παι-φάσσω*, *παι-πάλλω*, *δαι-δύσσειν* (*ἔλκεσθαι* Hesych.), *ποι-φύσσω*, *ποι-πνύω* and others. The *i*-diphthong recalls a reduplicative *i* in Skr. *bhāri-bhr-ati* and in Skr. *bī-bhar-ti* Gr. *γί-γνο-μαι*. See § 473 Rem. p. 17.

Latin. *mur-murāre* (murmur): cp. Gr. *μορμύρω* O.H.G. *murmurōn*. *tin-tinnāre tin-tināre, tin-tinnire* beside *tinnire*.

Keltic. Mid.Ir. *der-drethar* 'there is a sound, or a cry', s-pret. *derdrestar*, cp. II § 52 pp. 94, 95.

Germanic. O.H.G. *mur-murōm mur-mulōm* 'I murmur' (Mid.H.G. *murmer murmel* 'murmur, growl'): cp. Gr. *μορμύρω* Lat. *murmurāre*. O.H.G. *rērēm* 'I bleat, bellow, roar', pr. Germ. 1<sup>st</sup> sing. *\*raī-rēið*, cp. Litt. *rėju* 'I bellow'. This verb changed its inflexion on the analogy of verbs like pr. Germ. *\*pūlē-ið* (Goth. *pula* O.H.G. *dolēm*), see §§ 592, 708, 739; hence A.S. *rārian*, with the same change to the 2<sup>nd</sup> weak conjugation as is seen in *āolian* and some others.

Slavonic. O.C.Sl. *glagoljā* 'I speak' for \**gol-goljā* (*glagolū* 'word'); *mřūmřjā* 'I gnaw, nibble'; *gagnajā* 'I murmur, growl', cp. above, Gr. *γαγαίνειν*.

§ 466. 2. The reduplicating syllable has a Nasal instead of a Liquid; see I § 282 p. 226. Skr. *cañ-cūryatē* 'moves quickly or repeatedly'. Gr. *γογ-γύλλω* 'I round' (*γόγγυλος* 'round'), *ρορ-ρορίζω* 'I murmur'. Lat. *gin-grīre*.

This nasal reduplication passed on from roots ending in a nasal (see § 465) or a liquid to a few others: as Skr. *jañjap-yātē* from *jap-* 'whisper, say half-aloud', *dandahīti dandahyatē* from *dah-* 'burn' (which seemed natural in Skr. after such a form as *dan-daś-* from *√deñk-* 'bite'), Gr. *γογ-γύζω* 'I growl'.

§ 467. 3. In Sanskrit, *i* or *ī* is often inserted between the reduplicating syllable and the root; the Vedic language has *ī* before single consonants, *i* before more than one (compare Wackernagel, *Das Dehnungsgesetz*, p. 18). E. g. *bhāri-bhr-ati* 3<sup>rd</sup> pl. of *bhar-* 'carry', *vārī-vrj-at-* partic. of *varj-* 'turn, twist', *ghāni-ghn-at-* partic. of *han-* 'strike, kill', *ganī-gan-ti* 3<sup>rd</sup> sing. *gāni-gm-at-* partic. of *gam-* 'go', *kāni-krad-yā-māna-* partic. of *krand-* 'bellow', *nāvi-nō-t* 3<sup>rd</sup> sing. of *nu-* 'cry out'.

Where *-ī-* comes after the root syllable, *-ī-* is never found after the syllable of reduplication; thus we have only *nō-navī-* and *navī-nō-*.

Forms with an aspirate at the beginning of the reduplicator, such as *bhāri-bhr-ati ghāni-ghn-at-*, are the older and are phonetically correct; but those like *dāvi-dhv-at-* and *pānī-phañ-at-* have been altered, the former from \**dhāvi-dhv-at-* following *dō-dhavī-ti* (cp. I § 480 pp. 354 f.), the latter from \**phānī-phañ-at-* following *pam-phañ-at-* (cp. I § 475 p. 350). Thus at a later stage we find *barī-bhar-ti* instead of *bhārī-bhar-ti* too.

How to regard this *ī* is not quite clear. Thus much, however, seems to me certain, that it is the same as an *ī*,



also of varying quantity, which characterises Class III of our reduplicated forms; and I shall give in the Remark to § 473 a conjecture as to its origin.

§ 468. 4. Gr. *ἐγρη-γορα* 'I am awake' has the suffix *-ē* in the reduplicating syllable after the root (§§ 587 ff.), cp. *ἐγρη-σσω* 'I am awake', beside *ἐγρη-το* 'awoke', *ἐγείρω* 'I arouse' for \**ἐγερ-λω*. Perhaps the same *-ē* is contained in Skr. *carā-carā-s* 'going far away', *ghanā-ghanā-s* 'killing easily' and similar words (cp. *sarī-srīpā-s* 'creeping, crawling' and the like).

§ 469. b. The Root begins and ends in a consonant, and contains an *i*- or *u*-diphthong. This diphthong is represented in the reduplicator by *i* and *u* sonant, sometimes *ī* and *ū*, not followed by any consonant. Skr. *bi-bhē-mi* 'I fear' 3<sup>rd</sup> dual *bi-bhi-tas* partic. *bī-bhy-at* conj. 3<sup>rd</sup> sing. *bī-bhay-a-t*, O.H.G. *bi-bē-m* 'I shake'. Skr. *dī-dhy-ē* 'I behold', Avest. *dī-ḍaēiti* 'beholds'. Skr. pret. *a-ci-kṣip-a-t* from *kṣip-* 'throw', *a-rī-riṣ-a-t* from *rīṣ-* 'be hurt'. Skr. desid. *tī-tik-ṣa-tē* from *tij-* 'be sharp'. Gr. *πν-πν-σσω* 'I give to drink': cp. Skr. 2<sup>nd</sup> pl. *pi-py-a-ta* 2<sup>nd</sup> sing. *pī-pi-hī* (*pī-* 'make overflow, give plenty to drink'). *δίζομαι* 'I seek, strive' (orig. 'gaze at something') for \**ḍi-ḍi-o-μαι* (on *δίζημαι* see § 594): cp. Skr. 2<sup>nd</sup> sing. *dī-dī-hī* 3<sup>rd</sup> pl. *dī-dy-ati*, *dī-* 'shine, be bright' (*ācha dī-* 'direct one's mind to'). Goth. *rei-rāi-p* 'shakes, trembles': cp. Skr. *lē-lāya-ti* 'moves, trembles' with reduplication of the type of *a* (1) above (§ 465); the inflexion *reira reirāis* etc. is explained by the analogy of verbs like *paha* 'taceo', see §§ 592, 708, 739. Skr. *ju-hō-ti* 'offers', pret. *a-cu-krudh-a-t* from *krudh-* 'grow angry', *a-dū-duṣ-a-t* from *duṣ-* 'grow bad, perish', desid. *bu-bhut-sa-ti* from *budh-* 'wake, learn'.

Remark 1. Despite such forms as Skr. *ḥi-ḥu-ṣ a-pi-plav-a-m* Gr. *τι-τύσσομαι πν-πν-σσω* (cp. II § 52 Rem. p. 97), I yet believe that where the *i*-roots had originally *i* in the reduplication, *u*-roots had *u*. The palatal consonant in the reduplicator of verbs whose root initial is a velar consonant does not prove that *ju-hō-ti* is instead of \**ji-hō-ti*, *a-cu-krudh-a-t* instead of \**a-ci-krudh-a-t*, or *bu-bhut-sa-ti* instead of \**bi-bhut-sa-ti* (cp. *bī-bhar-ti a-pi-sprṣ-a-t* etc., § 473); for *ku-* may have become *cu-* on the analogy (say) of *a-ci-krad-a-t*, and of perfect forms such as *cu-krōdha cu-krudhur* where *cu-* is instead of \**ca-* = Idg. \**qe-* (cp. Rem. 2).

Remark 2. *i* or *u* in the reduplicator of perfects like the following is not original: Skr. *ri-rēca cu-krōdha i-yāja u-vāca* Lat. *sci-cidī tu-tudī*, O.Ir. *ro chuala* for \**cu-clova*, see § 851, 868, 878.

§ 470. *c.* The Root begins in a sonant and ends in a consonant, and so also the Reduplicator.

1. Roots ending in a single consonant. Skr. *āl-ar-ti* 'moves', *am-am-a-t* 'he was hurt'. Armen. *ar-ar-i* 'I made' (pres. *ar-ne-m*), beside Gr. *ἀρ-αρ-ίσκω* 'I join to', *ἡρ-αρ-ο-ν ἀρ-αρ-εῖν*; perf. *ἄρ-ᾱρ-α*. Gr. *ἡγ-αγ-ο-ν ἀγ-αγ-εῖν* from *ἄγω* 'I lead', *ὤρ-ορ-ο-ν ὀρ-ορ-εῖν* from *ὀρ-νύμι* 'I arouse', perf. *ὄρ-ωρ-α* 'I have arisen, I move', *ὄπ-ωπ-α* 'I have seen, see'.

2. Where roots end in two consonants, only the first appears in the reduplicator (cp. Skr. *vār-vart-ti* from *√vert* etc., § 465). Gr. *ἄλ-αλκ-ε* 'he warded off'. Skr. perf. *ān-āśa* (pres. *aś-nō-ti* 'attains' for \**ñk-*) O.Ir. perf. *t-anac* 'I came' (-*c* for -*nc-*) Gr. aor. *ἐν-εγκ-εῖν* 'to bring' (cp. Skr. *anāśa* Gr. *κατ-ήνοκα* § 846), Skr. perf. *an-āñja* (*añj-* 'anoint'). On the analogy of these perfects arose in Sanskrit *an-arca* (*arc-* 'shine, praise'), see § 851.

§ 471. II. The reduplicating syllable ends in *e* or *ē*, no matter to what vowel grade the root belongs. This was the kind of reduplication used for the Perfect and for certain classes of the Present and Aorist, both in the parent language and later. I have by no means convinced myself that *ē* belonged originally only to forms with *ē* in the root syllable, and that it was the echo of the root; nor that its use with other roots is due to analogy. See § 473, Remark.

First, forms with *e* short in the reduplication.

Perfect. Skr. *ba-bhūva* Gr. *πε-φύασι*, *√bhey-* 'become, be'. Skr. *ta-sthimá* Gr. *ἔ-σταμεν* Lat. *ste-timus*, *√stā* 'stand'. Gr. *πέ-πᾱγα πέ-πηγα* Lat. *pe-pigi* Goth. *faí-fah*, *√pāk-* *pāg-* 'make fast'. Gr. *γέ-γευμαι* O.Ir. *do-roigu* for \**ró-gegu* (§ 878), *√gēys-* 'taste, try, enjoy'. Gr. *λέ-λοιπα*, *√leiq-* 'leave'. O.Lat. *pe-pugi*. By late re-formation, as has been pointed out (§ 469, Rem. 2), we get Skr. *ri-rēca cu-krōdha i-yāja u-vāca* Lat. *sci-cidī pu-pugi tu-tudī*, O.Ir. *ro chuala*.

Pr. Ar. *\*sa-zd-* (= Avest. *hazd-*) became Skr. *sēd-*, e. g. 1<sup>st</sup> pl. *sēdimá* (I § 591 p. 447), and pr. Ar. *\*ia-īt-* became Skr. *yēt-*, as mid. *yēt-ē* (Avest. 1<sup>st</sup> pl. act. *yaēp-ma*). *ē*, which here and in similar examples is regular, spread by analogy, and thus we get *pētímá* instead of *pa-pt-imá* (the older form, used along with the later).  $\sqrt{\text{pat-}}$  'fly, fall', and *nēšimá*, from  $\sqrt{\text{naš-}}$  'be destroyed'. Then again *ē* in Irish arose by compensatory lengthening, as perf. *ro gēnar* 'natus sum' for *\*ge-gn-* ( $\sqrt{\text{gen-}}$ ), see I § 523 p. 380, § 620 p. 467. Lat. *sēdimus* might be derived from *\*se-zdimus* (I § 594 p. 450), and *lēginus cēnimus* be explained on the same principle as Skr. *pētímá*. But of Germ. forms like Goth. *sētum* (*sat* 'I sat') *mētum* (*mat* 'I measured') *qēmum* (*gam* 'I came'), and of Lith. forms like part. *sēd-ęs* (*sėdu* 'I sit') *bėg-ęs* (*bėgu* 'I run') *kėl-ęs* (*kelù* i. e. *\*kel-iù* 'I lift') *vėm-ęs* (*vemiù* 'I break wind'), there is none which can be due to compensatory lengthening in these several languages. We must therefore assume that here the unreduplicated root with Idg. *ē*, the 3<sup>rd</sup> strong grade of the *e*-series, acted as the weak stem for the perfect. This form of the root is quite clearly the perfect stem in Skr. *sāh-vās-* beside pres. *sāh-a-ti* = Idg. *\*sēgh-e-ti*, and in O.Ir. *ro mīdar* 'iudicavi' beside Gr. *μῆδ-ι-ται*, and others. See § 480 Rem., and § 494. *mēt-* in Goth. *mētum* must therefore be identified with O.Ir. *mīd-* Gr. *μῆδ-*. Weak reduplicated stems often became hard to pronounce; and hence they were often exchanged for this kind of unreduplicated form in the Germanic and Baltic branches, and perhaps in Latin too. See further in §§ 848 and 893.

The discovery of these doublet stems in the Idg. perfect, *se-zd-* and *sēd-*, makes it anything but certain that *\*ēd-* was a contraction of reduplicated *\*e-ed-* in Skr. *adima* Lat. *ēdimus* Goth. *-ētum* Lith. *ėdęs* O.C.Sl. *jadŭ* (from  $\sqrt{\text{ed-}}$  'eat'). *\*ēd-* may have been a stem like *\*sēd-*; and this to me seems more likely to be true. See § 848. 3.

Present and Aorist. Skr. 3<sup>rd</sup> pl. *sa-śc-atī* 3<sup>rd</sup> sing. *sá-śc-a-ti* Gr. *ἐ-σπ-αιτο*,  $\sqrt{\text{seq-}}$  'sequi'. Gr. *ἐπ-α* (Gort. *πο-*

-*φειπάτω*) stem Idg. \**ue-ug-*, Skr. *á-vōc-a-t* Gr. *ἐ-ειπ-ο-ν* stem Idg. \**ue-ug-o-*, √ *ueg-* 'speak' (cp. §§ 557, 561).

§ 472. *ē* is less frequent than *e* in the reduplicator. Many perfects in the Vedas have *a* = Idg. *ē*, as *da-dhara* (*dhar-* 'hold'), *mā-mṛjur* (*marj-* 'wipe'), *vā-vaśur* (*vaś-* 'desire'); an example of this kind in Avestic is Gāthic 3<sup>rd</sup> sing. *vā-ver'zōi* (*var'z-* 'work').

The same *a* is found in Intensives through all periods of Sanskrit; e. g. *da-dhar-ti* beside *dar-dhar-ti*, *bā-badh-ē* beside *bad-badh-ē* (*badh-* 'press, oppress'), *pā-pac-ya-tē* (*pac-* 'cook'). A similar agreement between the reduplicators of the perfect and the present intensive is seen in perf. *dī-dhay-a* and pres. intens. *dī-dhē-ti*, from *dhi-* 'think'. It is obvious that the closely allied in meaning of the completed perfect (or present perfect) and the intensive had some part in the spread of reduplicating *a* in the Vedic perfect.

Analogous Greek forms are the perfect *ἐγὴ-γερ-μαι* from √ *ger-* 'awake', which agrees with Skr. *jā-gār-a* *jā-gr-vās-* (present *jā-gar-ti* *jā-gr-hī*), and the Homeric present *δη-δέχ-αται* 'they welcome' (§ 560).

Remark. Some have wished to see this redupl. *ē* in other Greek perfects. But the view is unsafe. See the Author, Gr. Gr.<sup>2</sup> § 131 p. 164. Nothing much is proved by Cret. *ἀπ-ήτελεσε* (Cauer, Del.<sup>2</sup> no. 132. 5) and *ἱ-γατται ἡ-γαμμίνο*: (J. Baunack, Berl. Phil. Wochenschr., 1887, col. 60; Th. Baunack, Philologus XLIX 594), since it is very doubtful whether they come from \**ση-τελ-* and \**γη-γασ-* (cp. § 476, Rem. 2).

§ 473. III. The Reduplicator ends in *i* or *ī*, the Root having a different vocalism. This is the prevailing mode, and has been since proethnic times, with certain classes of aorist and present stems. I am very far from satisfied with the view that this *ī* originally was used only with roots containing *i* (as Skr. *bi-bhē-ti*, type I b. § 469), which it merely echoed, and that it only spread to other roots by analogy.

Remark. The *ī* of Skr. *á-jī-jana-t* *bī-bhar-ti* Gr. *γί-γνο-μαι*, as has been said in § 467 pp. 13 f., I would identify with *ī* in the Skr. intensives *bhāri-bhar-ti* *bhāri-bhr-ati* etc. These and the like reduplicative syllables may once have had a real independence, and -*i* -*ī* may have been some inflexion, perhaps a case ending. These were doubtless

sentences of the same kind as Lith. *dektù dēga* 'it burns up clear' (§ 260. p. 161), Umbr. *subocau suboco* 'invoco invocatione, I appeal appealingly'; for similar phrases from other languages, see Pott, *Doppelung*, 151 ff.

If this is correct, the *ī* of *\*ḡi-ḡen-* and similar forms originally came from roots ending in a vowel, such as *\*dī-dō-* (*διδωμι*), *\*dhī-dhē-* (*τ'θηναι*). When the cohesion between the parts had become so firm that the *ī*-case was regarded as being simply a "reduplication", — this idea was greatly encouraged by the use of real reduplications of the type of I *b*, as *\*bhī-bhai-* *\*bhī-bhī-* — two results might follow: (1) forms like *\*ḡi-ḡen-* *\*bhī-bher-* came into existence, and (2) with roots beginning in a sonant a simple *ī* was used for reduplicating, e. g. *\*ī + oq-* becoming *\*iq-* (Skr. *ik-* Gr. *ἰπ-*) even in the parent speech, and such forms as Skr. *īḡ-arti* Gr. *ἰ-αῖω* (see p. 19). Further, (3) in Sanskrit, or perhaps earlier still, the use of (say) *tari-* and *tar-* as variant reduplicators (*tari-tr-at-* and *tar-tari-ti tār-tur-āṇa-s*) led to the making of *marī-mṛj-* (instead of *\*marjī-mṛj-*) beside *mar-mṛj-*, and the like. Does *αι* in Gr. *μαι-μάω παι-πάσσω παι-πάλλω* etc. represent another case ending, and are the words formed on the same principle as we are supposing these with *-ī* to be? If so, *ο* in the *οι* of *ποι-πνύω ποι-φύσσω* must be ascribed to the influence of *πορ-φύρω μορ-μύρω γογ-γύλλω* etc.; for *παι-πάσσω : γυρ-γαίρω = ποι-φύσσω : μορ-μύρω*.<sup>1)</sup>

If this be really the origin of redupl. *ī*, the question arises whether *e* and *ē* in words like Gr. *πε-φύασι* and *ιγγή-γερωσι* Skr. *jā-gāru* (type II, see §§ 471—2) may not be the case-ending of a root noun. As before, we should have to start from roots ending in a vowel, from groups such as *dē + dō-* (Gr. *δέ-δωκα* Skr. *da-dāu*).

Skr. *tī-ṣṭh-a-ti* Gr. *ῖ-στη-μι* Lat. *si-stō* O.Ir. *do-airissid* (I § 109 *e* p. 103, § 516 p. 377) O.H.G. *se-stōm* (pr. Germ. *\*si-stō-mi*, I § 35 p. 35), *√stā-* 'stand'. Skr. *bī-bhar-ti* Gr. *ἑσ-πιφθάναι* (§§ 539, 542), *√bher-* 'ferre'. Skr. *jī-jan-a-t á-jī-jan-a-t* Gr. *γί-γν-ο-μαι* Lat. *gi-gn-ō* O.Ir. *gi-gnid*, *√ḡen-* 'beget'. In Sanskrit thematic aorists the quantity fluctuated; *i* before more than one consonant, and before a single consonant when a long syllable followed; *ī* before a single consonant followed by a short syllable (cp. Wackernagel, *Dehnungsg.* p. 18); e. g. *á-pi-sprś-a-t* (*sparś-* 'touch') and *á-di-dīkṣ-a-t* (*dīkṣ-* 'be consecrated'), but *á-jī-jan-a-t*. Greek has *ι* only in *πί-πτ-ω* 'I fall' (cp. Skr. *á-pī-pat-a-t*); but here *ι* may have been borrowed from *ῖ-πτω*, which was connected

1) Another explanation of this *ī* is given by Per Persson, *Stud. zur Lehre von der Wurzelweiterung*, p. 216 footnote 1. Per Persson's is really not very different from mine.

with it in meaning; if so, it is no example of the principle we are discussing.

Presents with *-s-* (§§ 666 ff.). Skr. *ji-jñā-sa-tē* from *jñā-* 'learn, know', *dī-dā-sa-ti* *dī-tsa-ti* from *dā-* 'give', *mī-mā-sa-tē* from *man-* 'think'. O.Ir. *no-gigius* 'I will pray' for *\*-gigetsō*, beside *no guidiu* 'I pray'.

Presents with *-sk-* (§ 678). Gr. *δι-δάσκω* 'I teach' (perf. *δε-δίδαχα*), Lat. *discō* for *\*di-tc-scō* (perf. *di-dicī*).

The *i*-vowel alone is used for the reduplication with roots beginning in a sonant. Skr. *īpsati* (cp. *apsanta* § 659) beside *ap-nō-ti* 'acquires', *īrtsati* beside *rdh-nō-ti* 'thrives' fut. *ardhiṣ-yatē*; with *īkṣatē* 'sees' (cp. O.Pers. *patiy-axšaiy* § 559) is connected Gr. *ἴπ-* in Hom. *ὀπ-ἴπ-εὐώ* 'I ogle' (*παρθενο-οὐππης*),<sup>1)</sup> which is an analogical re-formate like *ὄπ-ωπα* instead of *\*ὠπα*, *ἰδ-ηδώς* instead of *\*ῆδώς*. Skr. *ty-ar-ti* beside *ār-ti* from *ar-* 'set in motion', Avest. 3<sup>rd</sup> sing. conj. *uz-yarāp* i. e. *-iyar-āp*; Skr. *iy-ē-ti* beside *ē-ti* 'goes', the only evidence for which is its 2<sup>nd</sup> sing. pret. *āiy-ē-ṣ* (*R.V.*, v. 2. 8), Avest. 3<sup>rd</sup> pl. conj. *yeyan* = Ar. *\*iy-ay-ān* (Bartholomae, Ar. Forsch. II 71 f.); Gr. *ἰ-αῖω* 'I spend the night', *ἰάσκειν ἄγειν* (Hesych.) for *\*i-ay + σκω*; O.Ir. *i-orr* fut. of *orgim* 'I destroy, kill' (beside O.H.G. *arg* 'that which is bad'). The former group, with the reduplication vowel and root vowel contracted together, was certainly proethnic: *\*ip-* and *\*iq-* for *\*ī-əp-* *\*ī-əq-*, or something of the kind. But it is possible that Skr. *ty-arti* and others of that type are a re-formation of later date, like Goth. perf. *ai-áuk* from *áuka* 'I increase', *-ai-áik* from *-áika* (*af-áika* 'I deny, refuse').

On the difference between Gr. *τι-θῆμι*, with orig. *i* in the reduplicator, and Skr. *dá-dhati* Lith. 2<sup>nd</sup> pl. *dè-ste* with orig. *e*, see § 538.

It has been pointed out (§ 469 Rem. 1, p. 14) that *i* is found in the reduplicator even where the root contains *u*-vocalism. But, as I said in that place, I regard Skr.

1) I cannot agree with Kretschmer in deriving *ὀππ-* from *\*oqi-oq-* (Kuhn's Zeitschr., xxxi 385).

*ju-hó-ti*, *a-cu-krudh-a-t*, *bu-bhut-sa-ti* and similar forms as being genuine proethnic types, and not as having changed *i* to *u*.

§ 474. IV. A fourth type, of unknown origin, is represented by a considerable number of forms in Sanskrit, and by two in Greek. (Cp. Bezzenberger, Bezz. Beitr. III 310).

Skr. desid. *āśiṣiṣa-ti* from *aś-* 'eat', the grammarians also cite *aniniṣa-ti* from *an-* 'breathe', *arjihiṣa-ti* for *\*arjihijhiṣa-ti* (I p. 480 p. 354) from *arh-* 'deserve, be worth' and others; aor. *arpipa-t* (unaugmented) beside *arpáyati* 'sets in motion, shakes' (§ 797), in grammars also *ānina-t*, *arjiha-t*, *aubjija-t* (*ubj-* 'keep down, squeeze together') and others.

Gr. *ἐρύκαο-ν* from *ἐρύκω* 'I hold back' and *ἐντίπαο-ν* from *ἐντίπτω* 'I address'; beside *ἐνένιπο-ν*, type I c (§ 470).

§ 475. A few remarks are now needed on the way in which Consonant Initials are treated in Reduplication.

1. There was originally no difference between the beginning of root and reduplicator, when the root began with one consonant, as *dō-* 'give' Skr. *dā-dati*, Gr. *δί-δωμι*, Lat. *de-dit* Osc. *de-ded*, O.C.Sl. 3<sup>rd</sup> pl. *da-detŭ*. But a great many differences were brought about by phonetic change. For instance, in Greek and Sanskrit the *initial of the Reduplicator* was affected by the principle of dissimilation of aspirates which held in those languages, e. g. Sanskrit *dādhati* for *\*dha-dhati*, *babháva* for *\*bha-bháva* (I § 480 p. 354),<sup>1)</sup> Gr. *τίθημι* for *\*θι-θημι*, *πέποιθα* for *\*φε-φύαρι* (I § 496 pp. 364 f.). We were introduced in vol. I p. 483 footnote 1 to a dissimilation peculiar to Irish, *-roinasc* for *\*-ró-nenasc*, *-roichan* for *\*-ró-cechan*; compare § 878, below. The *Root-initial* is changed e. g. in pr. Idg. *\*si-zd-ō* (✓ *sed-* 'sit') = Gr. *ἵζω* (I § 590 p. 447, § 593 p. 449). It often happened, however, that a difference brought about by phonetic change was obliterated afterwards; as in Ved. perf. mid. *si-sic-ē* instead of *si-ṣic-ē*

1) The perfect *ja-bhára* is a mixture of *ba-bhára* and *ja-hára*. See von Bradke, Zeitschr. D. Morg. Ges. XL 665 f.

from *sic-* 'pour',<sup>1)</sup> Gr. Gort. *θί-θεθθαυ* instead of *\*τι-θεθθαυ* Att. *τι-θεσθαυ* (I § 496 p. 365, the Author, Gr. Gr.<sup>2</sup> pp. 73 f.), Ion. perf. *βέβα-μεν* instead of *\*δε-βα-μεν* = Idg. *\*ge-gm-* from *√gem-* 'go' (I § 428 b, p. 316), Umbr. *ře-ře* 'dedit' instead of *\*te-ře* cp. *teřust dirřust* 'dederit' (I § 369 Rem. 3 p. 281).

Remark. We may not assume that in Idg. *\*pi-b-e-ti* (Skr. *pibati* Lat. *bibit* O.Ir. *ibid*) *b* is simply for *p* by dissimilation. It is quite possible that *b* came from the imperative *\*pi-b-dhi* (for *\*pi-p-dhi*), cp. § 539.

476. 2. Where a root begins in more than one consonant, only the first of them is reduplicated. This rule held in the proethnic language and holds in its branches too. Examples:

Skr. *śu-śrāva* Gr. *κέ-κλυτε* O.Ir. *ro chuala* for *\*cu-clova* from *√kley-* 'hear'. Skr. *á-su-srōt* from *sru-* 'flow'. Gr. *κέ-κριμαι* from *κρίνω* 'I sentence', *ἔλγθι* 'be gracious' for *\*σι-σλγ-θι* (I § 565 p. 423). O.Ir. *ad-ge-grannatar* 'persecuti sunt', *ro selach* 'I struck down' i. e. *se-ślach* (I § 576 pp. 431 f.). Goth. *gai-grōt* from *grēta* 'I cry', *fai-flōk* from *floka* 'I lament', *sai-slēp* *sai-zlēp* from *slēpa* 'I sleep'.

Skr. *sa-smāra* from *smar-* 'remember', *a-śi-śnat* from *śnath-* 'pierce'. Gr. *ἐμαρται* 'it is fated' for *\*σε-σμαρται* (I § 565 p. 422), *πέ-πνίγμαι* from *πνίγω* 'I choke', *ποιπνύω* 'I pant'. Mid.Ir. *ro senaich* 'stillavit' i. e. *se-śnaich* (I § 576 p. 431).

Skr. *di-dvēṣa* from *dviṣ-* 'hate', *sa-svāna* from *svan-* 'sound', partic. *śā-śvasat-* from *śvas-* 'puff, pant, blow'; *ta-tyajē* from *tyaj-* 'forsake', *sa-syandē* from *syand-* 'move on'. Hom. *δείδιμεν* i. e. *δέ-δφιμεν* from *√dyei-* 'frighten' (I § 166 p. 147). O.Ir. *do-sefainn -sephainn* from *do-sennim* 'I hunt, drive' for *\*syend-* or *\*syemn-* (I p. 175 p. 154, II § 613).

Skr. *ci-kṣāya* from *kṣi-* 'possess', *ca-kṣāṇa* from *kṣan-* 'hurt, wound', Gr. *κέ-κτημαι* from *κτάομαι* 'I get, win' (cp. I § 554 pp. 407 f., Kretschmer Kuhn's Zeitschr. xxxi 433).

1) We are not at liberty to explain *si-sic-ē* by saying that *sa-* = Idg. *se-* was the reduplicator in pr. Aryan (§ 851).



Avest. *hi-štaiti* O.Pers. *a-ī-štata* (I § 558 Rem. 1 p. 410), Gr. ἵστημι ἔστηκα, Lat. *si-stō* Umbr. *se-stu* 'sisto', O.Ir. *do-airissid sessam* for \**si-st-* (I § 109 *e* p. 103, § 516 p. 377), from √ *stā-* 'stand'. Avest. partic. *hi-spōsemna-* from √ *spek-* 'conspicere'. O.Ir. *se-scaind* 'he leapt'.

There are several variations from this type, of which the chief here follow.

The first is the commonest of them all (it is found in Sanskrit, Greek, Italic, Germanic), and perhaps began in the proethnic period. When a root began with *s* + an Explosive, both were often taken on into the Reduplicator, instead of simply the *s*. Thus Goth. *staī-stald* from *stalda* 'I possess', *skat-skáip* from *skáida* 'I divide'. In Sanskrit, Greek, and Italic dissimilation came in and destroyed the likeness of root and reduplicator; *s* was dropped either in the reduplicator (so Sanskrit, Greek, Latin) or in the root (Italic). Skr. *ta-sthāú ti-ṣṭha-ti* from *stha-* 'stand', *ca-skānda*, 2<sup>nd</sup> and 3<sup>rd</sup> sing. *kāni-ṣkan*, *cani-ṣkada-t* from *skand-* 'leap', *pa-sprdhē* from *spardh-* 'vie, strive for', *pani-ṣpadá-s* 'quivering' from *spand-* 'quiver'. This example of the principle of dissimilation Greek and Latin show only in a few nouns: *κο-σχυλ-μάτια* 'shreds of leather' *qui-squiliae*, *κα-σχάνδις* 'leek' are examples (Fritsche, Curt. Stud. vi 319 f.). With *s* dropt in the root-syllable Lat. *ste-ti sti-ti* Umbr. *stiti-steteies* Lat. *spo-pondi sci-cidi*. Compare Osthoff, Paul Braune's Beitr. viii 540 ff.; I do not think that his hypothesis is overthrown by Meringer in Zeitschr. öst. Gymn., 1887, pp. 371 f.

Remark 1. The reason why the present Lat. *si-stō* kept the old method, while *steti stiti* did not, was that this was the only reduplicated present with a root beginning in *s* + explosive. Observe too that all its perfect forms were once distinguished by the vowel *e* in the reduplicator instead of *i* (§ 471).

Secondly, when a verb stem beginning in two consonants simplified these to one in its unreduplicated forms, the reduplicated forms were treated as though the verb began originally in one consonant (§ 475). Gr. Dor. *πέ-πάμαι* 'I possess, have authority over' instead of \**κε-πᾶμαι* i. e. \**ke-kṃa-* (cp.

Skr. *-śi-śvi-ś*), because in the present and other tenses \**kṣā-* became *ṇā-* (I § 166 p. 147, § 654. 4 pp. 500 f., II § 117 pp. 370, 371). *σε-σόβημαι* for \**τε-σορβ-* (cp. Skr. *ta-tyāja*) following *σοβέω* 'I scare away' ground-form \**tjogéjō* (I § 459 p. 337). *τε-θήρακα* Thess. *πε-φειράκον* [τες beside *θήρ* Thess. *φείρ* 'wild beast' for Idg. \**gh̥m̥ēr-* O.C.Sl. *zvērī* Lith. *žvērī-s* (see Buck, Amer. Journ. Phil. xi 211 ff.), so that the reduplication would properly have been *κτ-*. Locr. partic. *φε-φασκότα* following *φασδάνω* (*ἀνδάνω*) 'I please' from *✓sūd-* (cp. Skr. *sa-svadē*). *ρί-ριπται* (Pindar) following *ρίπτω* 'I throw' for \**φρίπτω*; and Att. *ῥριπται* instead of the regular \*(*φ*)*ευρίπται* (the Author, Gr. Gr.<sup>2</sup> p. 31). *νι-νῆχθαι* from *νίχω* 'I swim' for \**ονᾶχω* (Skr. 3<sup>rd</sup> pl. *sa-sn-ur*). Lat. *me-mor memoria* formed from a perfect \**me-morī*, which probably arose on the analogy of unreduplicated forms with *mer-* for *smer-* (cp. *merda* for \**smerdā* etc., I § 570 p. 427), cp. Skr. *sa-smāra*. O.Ir. perf. 3<sup>rd</sup> sing. *rir* 'gave away, sold' from *✓per-* instead of \**i-r* for \**pi-pr-e* on the principles laid down in I § 339 p. 268, cp. § 878 below.

An exceptional type of reduplication is sometimes seen in Greek where verbs beginning in more than one consonant often have *ε-* for their reduplication, instead of one consonant + *ε*, even where the known phonetic laws did not demand that the consonant should drop. Examples are: *ε-βλάστηκα* beside *βε-βλάστηκα*, *ε-γραμμαι* (Cret. and elsewhere) beside *γέ-γραμμαι*, *ε-γνώκα*, *ε-κτῆμαι* beside *κέ-κτῆμαι*, *ε-σσυμαι* (*✓qīem-*). Probably *ε-ορώγα* (*φρηγ-*) and *ε-ορίγα* (*φρίπ-*) are of this sort, since there is no trace of *φ* having been used and dropped in these forms. See Curtius' Verb II<sup>2</sup> 144 ff. Lastly we must mention *ε-σταλκα*, *ε-σπαρμαι*, *ε-ρούηκα* (orig. *σε-σρν-*) and the like, beside *ἀφέσταλκα* *ἐφέσταλκα* (inscr.), and *ε-στηκα* *ε-σταμεν*. The last perfect kept its *spiritus asper* because *ῑ-στημι* *ῑ-σταμεν* had it.<sup>1)</sup>

1) In Boeotian or Laconian we must add to the perfect the aorist form *ῑτακα* for \**ῑστακα*. Hesychius' gloss *ῑτακαν* *ῑστησαν* should probably be assigned to one or other of these dialects (cp. I § 566 p. 423).

Remark 2. It is an obvious suggestion that in *ιβλάστηκα* etc. we have the augment in place of the reduplication, since in verbs with a vowel initial the augmented preterite and the perfect came to have the same beginning: e. g. *ἤρεθον: ἤρεθισμαι* (*ἡρεθίζω*), *ἤσκησα: ἤσκημαι* (*ἀσκέω*), *ἀφ' ἑκούμην: ἀφ' ἑγύμηναι*. But if so we should expect similar forms in verbs which began with one consonant, and such forms as *\*ἑ-βηκα* instead of *βι-βηκα* (see § 475).<sup>1)</sup>

We cannot suppose that the form *ἑ-ρεμυα* stands for *\*f-ρεμυα*, and that it gave the type for *ἑ-βλάστηκα* etc., because the dialect of Gortyn a has *ἑ-γεμυσαι*, and this dialect kept initial *f* before an *e*-sound.

The Cretan perfects *ἀπ-ῆστειλε ἑ-γεαται* mentioned in § 472 Rem., page 17 above, with *ῑ*-, only give a fresh problem to solve.

## THE AUGMENT.<sup>2)</sup>

§ 477. The Augment (*αὐξησης*), as it is called, is a syllable, Idg. *\*e-* = Skr. *a-* Armen. *e-* Gr. *ἐ-*, which prefixed to verbal forms serves to mark past time.

1) *ἑλογα* instead of *ἑλογγα* in two late sepulchral inscriptions is probably not a mistake in the graving, but a misformation, due to contamination of the perfect *ἑλογγε* or *ἑιληχε* at a time when this kind of perfect had become unfamiliar. (Thumb, *Mitteil. des deutsch. arch. Inst. in Athen*, xvi 176).

2) R. Garnett, On the Origin and Import of the Augment in Sanskrit and Greek, *Proceedings of the Philol. Society I* (1844) p. 265 ff. Fr. Müller, *Einiges über das Augment*, Kuhn-Schleicher's Beitr., iii 250 ff. J. Davies, On the Temporal Augment in Sanskrit and Greek, Hertford 1865. Faust, *Zur idg. Augmentbildung*, Strassb. 1877. A. H. Sayce, The Origin of the Augment, *Transactions of the Philol. Society*, 1885—1887, pp. 652 ff. Bréal, *De l'augment*, *Mém. de la Soc. de lingu.* vi 333 ff.

J. Avery, The Unaugmented Verb-Forms of the Rig- and Atharva-Vedas, *Proceedings of the Amer. Orient. Soc.*, May 1884, pp. xi f., und *Journal of the Amer. Orient. Soc.* xi 326 ff.

Ebel, *Die scheinbaren Unregelmässigkeiten des griech. Augments*, Kuhn's Zeitschr. iv 161 ff. La Roche, *Das Augment des griech. Verbums*, Linz 1882. Pöhlmann, *Quomodo poetae epici augmento temporali usi sint*, Tilsit 1858. Grashof, *Zur Kritik des homer. Textes in Bezug auf die Abwerfung des Augments*, Düsseldorf 1852. K. Koch, *De augmento apud Homerum omisso*, Brunswick 1868. Skerlo, *Über den Gebrauch (die Bedeutung) des Augments bei Homer*, Graudenz 1874. Molhem, *De augmenti apud Homerum Herodotumque usu*, Lund 1876. Bumke, *De augmento verbi Herodotei*, Braunsberg 1835. H. Lhardy, *Quaestionum de dialecto Herodoti caput primum: De augmento*, Berl. 1844.

It was originally an independent word, an adverb, followed by the verb, which then became enclitic; e. g. \**é liqet* 'he left' (Armen. *e-liē* Gr. *ἔ-λιπε*), and it may be compared with the Irish particle *ro* (= Gr. *πρὸ*) which is used before verbs of the historic tenses. But in all the languages which have kept the Augment, it has become an inflexional prefix (cp. II § 4 page 6). A trace of its original adverbial character remains in the accentuation of Greek forms like *παρ-έ-σχον* ('I offered'), which involves the same principle as that of *παρ-έν-θες* ('put in between') and of Skr. *sam-ā-cinutē* ('he heaps together, collects').

As to the origin of this adverb \**e*, and of \**ē*, which as we shall see later was used in the same way in the parent language, only uncertain conjectures are possible.

**Remark.** Older explanations are cited by Curtius, Verb I<sup>2</sup> 109 ff. Sayce's new suggestions do not commend themselves to me (see page 24 footnote). It would be best to regard \**e* as a locative of the pron. stem *o-*, with temporal meaning (see III § 409 p. 329); compare \**te* (Lith. *tē* O.C.Sl. *te*) from \**to-* and the like (III § 424 p. 349). The relation of \**e* : \**ē* has plenty of parallels, as \**te* : \**tē*, \**ne* : \**nē* (III p. 349 footnote, § 415 Rem. p. 337). Compare also Per Persson, *Studia etymologica*, p. 78.

If the verb had other prefixes besides the Augment, this stood immediately in front of the verb. But sometimes a verb compounded with a preposition became to all intents and purposes a simple form, and then the augment came right in front. Skr. *a-pīdaya-t* 'pressed' for \**pi-zd-* ('sit upon'), Gr. *ἰ-πίσζον* for *πi(σ)εδ-*, see § 795. Skr. epic *a-sambhramat* 'he trembled'. Gr. Att. *ἰ-κύνθων* beside *καθ-ηῦδον* 'I slept'. When the structure of verbs was thus forgotten, there could even be a double augment: Skr. epic *apraīṣīt* beside *praīṣīt* = *pra-aiṣīt* 'he drove out', Gr. *ἦν-εἰχέμην* 'I endured'. The same thing occurs in reduplicated forms; see § 850.

§ 478. The augment with verbs beginning in a Consonant. Examples: Pr. Idg. \**é bherom* 'I bore': Skr. *á-bharam*

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Kloppe, *Dissert. de augmento Herodoteo*, cp. I. II., Schleusingen 1848. Sorof, *De augmento in trimetris tragicis abiecto, praemiis de crasi, elisione, aphaeresi quaestione*, Breslau 1851.

Avest. *a-berem* O.Pers. *a-baram*, Gr. ἄ-φερον. 3<sup>rd</sup> sing. Skr. *á-da-dhat á-dhat* Armen. *e-d* Gr. ἔ-τίθει 1<sup>st</sup> pl. ἔ-θιμεν, √ *dhē-* 'place'. 3<sup>rd</sup> sing. Skr. *á-bōdhat a-buddha a-būbudhat* Gr. ἔ-πέν-θετο ἔ-πύθετο ἐπέπυστο, √ *bheydh-* 'awake, notice'. 3<sup>rd</sup> sing. Skr. *á-diṣṭa a-dikṣat* Gr. ἔ-δείκνυ ἔ-δειξε, √ *deik-* 'show, point'. 3<sup>rd</sup> sing. Skr. *á-gan* Armen. *e-kn*, √ *gem-* 'go, come'. 3<sup>rd</sup> sing. Armen. *e-tes* Gr. ἔ-δέχετο, √ *derk-* 'see'.

All that is left of the augment outside of these three groups are a few obscure Germanic forms: Goth. *iddja* 'he went' = Skr. *á-yat* (I § 142 p. 127), A.S. 3<sup>rd</sup> pl. *eódun* = Goth. *iddjēdun*, cp. §§ 587, 592, 886 Rem. But these are not free from doubt, because we find in Sanskrit epics the unaugmented form *iyā-t* as well as *a-yā-t* (with *iy-* instead of *y-* like *iy-ē*, § 493). So *iddja* too may represent the unaugmented Idg. \**iē-t*.

In Greek, *i-* was often obscured by being contracted with the following vowel, after *σ* or *φ* which once began the root had dropped (cp. I § 165 p. 146, § 564 p. 421, § 603 pp. 455 f.); e. g. *εἰπόμην* for \**ē-(σ)επομᾶν* from *επομαι* 'sequor', *εἶπον* for \**ē-(σ)επον* from *ερω* 'serpo', *εἶδον* 'I saw' for \**ē-(φ)ιδον* (Hom. *εἶδον*, Lesb. *εὐἶδον*), *ἐργάζομην* for \**ē-(φ)εργαζομην* (an inser. of Hermione has *ἐφ'εργάσατο*) from *ἐργάζομαι* 'I work'. On *εἰθίζον* 'I was accustomed', orig. \**ē-σφ'εθίζον*, *εἵλκον* 'I dragged', orig. \**ē-σφελκον*, compare I § 563. 7 p. 420, and the Author Gr. Gr.<sup>2</sup> § 13 p. 33. The aspirate of *εἰπόμην* *εἵλκον* *εἶπον*, like that of *ἔηκα ἤκα* pl. *εἵμεν* (for *ē-(σ)η- ē-(σ)ε-*, from *ἵημι* 'I send forth' for \**σι-σημι*) is doubtless due to the transference of the internal *h* (\**ē-ηεπόμᾶν* etc.) to the beginning; so it was in *ιερός* for \**iherós* (Skr. *iṣirá-s*) and other words, see Kretschmer, Kuhn's Zeitschr. xxxi 421.

In Greek, again, the augmented preterites of verbs which have lost their initial consonant are often treated like those of verbs that never had any (§ 480). This is commonest in later times. An example is Att. *ῥῆκησα* instead of \**ē-(φ)ου-κησαι*, from (*φ*)οικέω 'I live, dwell', following such forms as *ῥῆθησα* (*οἰδέω* 'I swell': Armen. *aitnum* 'I swell' O.H.G. *eiz* 'sore, abscess').

§ 479. In Vedic, some verbs beginning with *v*, *y*, or *r* have *a-* for their augment; as *á-vṛnak* from *vṛnākti* 'turns round' (see Delbrück, Ai. Verb., 79). *a-* is also found as augment with verbs beginning in *ā*, *ī*, *ṛ*; as *āúnat* from *unátti* 'wets' (see § 481). That this *a-* was original, at least in some of these forms, is made probable by the use of *ṛ-* instead of *é-* not infrequently before Greek verbs with initial *μ*. Examples: Hom. *ῥεῖδῃ* 'he knew' for \**ῥ-φείδῃ*;<sup>1)</sup> Att. *έώρων* 'I saw' *έάλων* 'I was captured' for \**ῥ-(h)οραων* \**ῥ-(h)αλων* (I § 611 p. 462); the aspirate in the last two is to be explained like that of *είπόμεν* *έηκα* (§ 478). Words like *ῥογαζόμεν* (beside *είροαζόμεν*) are less certain. It is true this form may be derived from \**ῥ-(f)εργ-*; but so may it be an ad-formate of verbs which began with *e-* in the pre-Greek period (cp. *ῥάκησα* § 478, above).

On the relation of \**ē-* and \**e-* see § 477 with the Remark, page 25.

Remark. On Greek forms with *ῥ-* compare G. Meyer, Gr. Gr.<sup>2</sup> pp. 421 ff.; the Author, Gr. Gr.<sup>2</sup> p. 150, and the works there cited.

Another view, which I think not probable, is that certain verbs with initial *f* have a prothetic *ῖ-*, and that from these were made preterites with the temporal augment (*ῥεῖδῃ* being to *ῖεινόμενος*; what *ῥευσθον* is to *ῖρευσθω* *✓* *reudh-*, cp. I § 626 pp. 470); afterwards, according to this view, other verbs with initial *f* but without prothetic *ῖ-* took *ῥ-* for augment.

On the other hand, I agree with those who refuse to see the Idg. augment \**ē-* in *ῖ-βουλόμην* 'I wished', *ῖ-δυνάμην* 'I could', and *ῖ-μελλον* 'I intended, I was to' do so and so. These forms occur in Attic from 300 B. C. onwards, and *ῖμελλον* as early as Hesiod (Thesg. 478, 888, 898). It is a fair conjecture that these were modelled on *ῖ-θέλων* 'I wished', from *θέλω*. In this Verb *ῖ-* was no augment but a preposition, another ablaut-form of *ω-* in *ῖ-φείλω* etc., and identical with Skr. *ā* 'to towards'. The *ῖ-* of *ῖ-θέλω* is a third ablaut-form of the same prefix, to be compared with *a* in Avest. *a-sās-* etc.; but the use of *ῖ-* with *θέλω* was confined to its preterite in prehistoric times, because *ῖθέλω* : *ῖθέλων* seemed to be related as were *ῖφείω* : *ῖφείων*. Cp. Osthoff, Perf. 129, 604; Bartholomae, Ar. Forsch. II 169; above, vol. III § 246 p. 145.

1) Some scholars would write *εὔεῖδῃ* in the Aeolic fashion, for which there is no authority at all. Attic *ῥέει* cannot be contracted from *ῖειδ-* but only from *ῥειδ-*.

§ 480. In verbs with initial Sonant the augment has everywhere ceased to be a separate syllable. It was contracted with the root-initial in the original language (cp. I § 114 p. 107).

Examples. Pr. Idg. *\*ēsni* for *\*e esni* or *\*ē esni*, cp. pres. *\*es-mi* = Skr. *ásmi* etc.: Skr. *ásam* Avest. 3<sup>rd</sup> sing. *ās* O.Pers. *aham* i. e. *āham*, Gr. Hom. *ἦα* Att. *ἦ* 3<sup>rd</sup> sing. Dor. *ἦς*; 1) cp. O.C.Sl. *-jachū* for *\*ēsom* in imperfects like *neséachū* (§§ 493, 510, 903). Pr. Idg.: *\*ēini* from *\*ei-mi* 'I go': Skr. *āyam* 3<sup>rd</sup> sing. *ālt* Avest. 3<sup>rd</sup> sing. *āi* O.Pers. *ayam* i. e. *āyam*, Gr. *ἦα* instead of *\*ḥu* for *\*ḥu* (§ 502); compare Lith. *ėjaũ* 'I went' from the stem *\*ei-ā-* (§ 586). Gr. *ἦμιζον* from *\*ei-ā-* 'I strive'. O.C.Sl. *s-aorist jasū* = *\*ēt-so-m*, *✓ed-* 'eat'.

It is extremely probable that the same augment is seen in Lithuanian present forms of the substantive verb beginning with *ē-*, as pl. *ěsame ěsate* dual *ěsava ěsata* beside *ěsame* etc. and *ěsme (ěsme)* etc. Like O.C.Sl. *-(j)achū -(j)aše* etc. (see above), these were originally imperfect. But after all the other preterites of present stems with thematic vowel had fallen into disuse, this imperfect of *es-* was quite isolated; step by step it gave way to *bupaũ*, while at the same time the forms which ended like those of the present system came to be used as equivalent to them; and later the participle *ěsąs* was formed and used side by side with *ěsąs*, and in some dialects *ěsũ ěsĩ* beside *esũ esi*. Perhaps Lat. *ēs* 'thou art' (also *ēs*) is also an augmented form, and represents Idg. *\*ēs-s.* 2)

Remark. Osthoff (Perf., 184 ff.) assumes that Lat. *ēs ēst estis* from *edō*, and Lith. *ėdmi ėdu* etc. O.C.Sl. *jamĩ (ěmĩ)* are forms of the augmented imperfect used as present. I think that their *ē-* may very well have this origin. But another supposition is quite as good, nay

1) We are certainly tempted to follow Bopp, Lagarde, and Bugge, and add Arm. *ēi* 'eram' 3<sup>rd</sup> sing. *ēr*; but Idg. *ē* seems always to become Arm. *i*. Compare Hübschmann, Kuhn's Zeitschr. xxiii 12.

2) So too the augment has crept into the present and future in Modern Greek, as *αἶς ἐβλέπω, θὰ αἶς ἐθώσω* (Hatzidakis, Kuhn's Zeitschr. xxx 375); and so the augment of Armen. *e-kn* 'he came' and *e-d* 'he placed' has found its way into allied forms, as fut. *ekiç* and *ediç* (Hübschmann, Arm. Stud. i 28; Bugge, Kuhn's Zeitschr. xxxii 38).

better — that they represent the ablaut-grade Idg. \*ēd-. Then \*ēdmi : \*edmi (Skr. *ádmi*) as Skr. imper. mid. *sák-śra* : *sák-śva* (✓ *segh-*), and as Skr. *sáhati* : *sáhatē* (Gr. *ἔχειν*), *dhávati* : *dhavatē* (Gr. *ἔλω*), Gr. *μῆδομαι* : *μῆδομαι*, Lith. *bėgu* : Gr. *φέβουμαι*, and so forth (§ 471 p. 16); and, if so, the ēd- of \*ēdmi must be identified with that of the s-aorist Lat. *esse* O.C.Sl. *jasū* (*ěsū*), and probably with that of the perfect forms Lat. *ēdi*, Lith. *ėdęs* O.C.Sl. *jadŭ* (*ědŭ*); see *loc. cit.* above. One view only I must distinctly oppose; the view of those who regard this root as not belonging to the recognised e-series, but to an ē-series, and who regard Skr. *dāmi* as not original, while the \*ēdmi of Latin and Balto-Slavonic is. Compare § 494.

How came this ē-grade (*mēd-* etc.) to exist in e-roots? It is impossible to say. It is found, in the proethnic stage and later, not only in the present and aorist, but in the perfect too (§ 848. 3), and also in nouns (e. g. Gr. *μῆδος* *μίστωρ* Armen. *mid*); and we have no right to limit this ē to any single tense. It is certainly remarkable that the perfect forms with ē never had the reduplication (Skr. *sāh-rās-* etc.). But there are other original unreduplicated perfects, as for example \**μοῖδε* 'knows' see *loc. cit.*).

What was originally the quality of the resultant vowel, when an augment was contracted with the initial a- or o- of a root, it is hard to say. The Aryan languages of course always have a-, whether the root began in e, o, or a; as Skr. *ájat* from *ájati* 'he drives' Gr. *ἄγει*, *ápasyat* from *apasyáti* 'is active' Lat. *operátur*. In Armenian, verbs beginning with a- have apparently no augment in the preterite, as *ac* 'he led', *ar* 'he took' *auc* 'he anointed' *anç* 'παρήλασε'; we also find a re-formation with augment ē-*anç* (with later ē instead of e). Greek forms like *ἄγον* Ion. *ἡγον* (from *ἄγω* 'I lead'), *ὀζον* (from *ὀζω* 'I smell'), *ὠθῆσαι* (from *ὠδέω* 'I swell') are suspicious, because their long vowel might come from analogy, once such forms as \**esti* (*ἔστι*) : \**est* (*ἔς*) had produced a belief that the lengthening of an initial vowel marked the past tense. Beyond all doubt this is the cause of the long vowel in such words as *ἰκέτευσα* (from *ἰκετεύω* 'I beseech') and *ὑμεναίουν* (*ὑμεναιῶ* 'I sing the bridal song'); compare what is said in § 643 on *ὄρ-νῦ-μι* : *ὄρ-νῦ-μεν*.

§ 481. In the plural and dual of the pret. of \**es-mi* 'I am' and \**ei-mi* 'I go', if Idg. \*e- is allowed to be their augment, we should expect forms like Skr. \**á-sma* \**á-san*, Gr. \**εἰμεν* Lesb. \**εἰμμεν* and Skr. \**éma* \**á-yan*, Gr. \**εἰμεν*,



op. pres. 1<sup>st</sup> pl. Skr. *s-más*, *i-más* and the unaugmented imperf. Skr. Ved. *s-an* Avest. *h-en* and Avest. *i-ta* Gr. ἔ-τε-ν. One such form is Avest. *ahma* Gathic *ēhma* = pr. Ar. \**a-sma*. Otherwise we find only *dsma dsan aīma dyan*, Avest. 3<sup>rd</sup> dual *aitem*, O.Pers. 3<sup>rd</sup> pl. *aha aya* i. e. doubtless *aha aya*, Gr. ἡμεν ἦστε, O.C.Sl. 2<sup>nd</sup> pl. *-(j)as-te*. If we suppose that the augment here was *ē* (cp. § 477 and Rem. p. 25, § 479 pp. 26 f.), the sing. and dual-pl. agree in their initial syllable right back as far as the parent speech. However, it is possible, and probably better, to assume that the long vowel came from the singular, the initial of *dsam* ἦα as compared with *dsmi* εἰμι being classed in the popular imagination with that of the preterites *djam* ἄnam ἦρων etc., which had a long initial vowel in all persons.

Remark 1. *η* in ἡμεν ἦτε must be a re-formation (cp. I § 611 p. 461). But there is no need to bring in the influence of the sing. ἦα, since \**ē* + *i-ent* may conceivably have been the 3<sup>rd</sup> plural (cp. § 1020. 1. a).

Remark 2. Osthoff's view (Perf., 151 f.) that Skr. *āsta* Gr. ἦστε came from \**é esté*, and that \**esté* was the weak-grade form of *✓es-* with secondary or bye-accent, is no longer tenable. See Bartholome, Bezz. Beitr. xvii 105.

In Sanskrit, verbs beginning with *ā-*, *ī-*, or *ṛ-* have *au-*, *ai-*, and *ar-* in their augmented preterite. *ā́nat* from *unátti* 'wets' (*ud-*). *ā́hat* from *úhati* 'removes, pushes'. *ā́chat* from *icháti* 'wishes'. *ā́śata* from *ísatē* 'owns'. *ārchat* from *ṛcháti* 'reaches, gets'. The augment here was probably *ē*; see § 479 above, on *á-vṛnak* etc. Other attempts to explain these are given by Schleicher Comp.<sup>4</sup> p. 738 (cp. J. Schmidt, Vocalismus, I 44) and Bartholomae, Ar. Forsch. II 74 f.

§ 482. In Herodotus are a series of apparently unaugmented forms, of which *αἵτε* (*αἰτέω* 'I ask'), *εὔχετο* (*εὔχομαι* 'I pray'), *αὐξετο* (*αὐξω* 'I increase') are examples. These may be quite regular, and come from older forms with initial *ā-*, *ē-*, *au-*, as laid down in vol. I § 611 p. 461.

The vowels in the first syllable of such forms as Att. ἡτουν (*αἰτέω*), ηὔξαμην (*εὔχομαι*), ηὔξον (*αὐξω*), and ἦντησα (*ἀντάω* 'I meet'), ἦρχον (*ἄρχω* 'I lead'), ὤρνον (*ὀρνέμι ὀρνύω*



'I arouse, set a-going') is due to the analogy of ἡγόν : ἄγω, ἡρῶζον : ἐρῶζω etc. ἡμεν ἡτε are discussed in § 481 with the Remark, just above.

§ 483. The Augment Omitted. In the parent language the augment could be dispensed with. The forms with which it was used were not confined to the expression of any particular tense or time, and they could be used for the past without any augment. This was easy enough if past time were unmistakeably indicated by the context, or by some other expression in the sentence, such as Skr. *purā* Gr. *πάρως*. Compare § 909.

The use of both augmented and unaugmented forms (as \**é-bherom* and \**bhérom* in the sense of 'I carried') continued in the separate languages, and survivals of it occur right down into the historic period. The facts are as follows.

In Sanskrit of the Vedic period both modes of expression are used together; in the Rig-Veda they are about equally balanced. But even in Vedic we can see a growing preference for forms with the augment. In the Brahmanas and in Epic poetry the augment is rarely omitted. And in later or classical Sanskrit, which was ruled by the native grammarians, augmented forms alone are used. In Avestic the double usage is also found, though the augment occurs rarely in comparison with the number of times it is omitted. But Old Persian seems to know no preterites save those which have an augment (a few forms in this language are doubtful).

In Armenian the augment was kept only before monosyllabic verbal forms which kept their root vowel, or before those which without it would not have been a complete syllable. Thus the 3<sup>rd</sup> sing. aor. *e-liĕ* = Gr. *ἔλιπε* has it, but 1<sup>st</sup> sing. *liĕ* has it not.<sup>1)</sup> It is found in other persons besides the 3<sup>rd</sup> sing. with the aorists of the roots *dhē-* 'place', *dō-* 'give', and *gem-* 'come'; thus 1<sup>st</sup> sing. *e-di e-tu e-ki* 3<sup>rd</sup>

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1) It is a fair assumption that, in the 1<sup>st</sup> sing., \**eliĕi* beside \**liĕi* dropt out of use before \**liĕi* became monosyllabic.

sing. *e-d e-t e-kn*. That the augment was kept or dropt according to the number of syllables in the word is clear from 1<sup>st</sup> pl. *tuakē* beside sing. 1<sup>st</sup> pers. *e-tu* 2<sup>nd</sup> *e-tur* 3<sup>rd</sup> *e-t* pl. 2<sup>nd</sup> *e-tukē* 3<sup>rd</sup> *e-tun*, and by comparison with 1<sup>st</sup> pl. *e-daikē e-kaikē* (beside *e-di e-ki*). The augment of *edi* and *eki* passed into other parts of the verb, for which see page 28, footnote 2.

In the Greek of Homer and the later epic poets, the use of the augment is artificial. In the later epic it is less and less omitted as the language approaches more nearly to ordinary prose. In prose, augmented forms predominated from the very first. The only exceptions are the pluperfect, which shows the old variation, e. g. *πεπόνθη πεπόνθειν* with *ἰ-πεπόνθη ἰ-πεπόνθειν*, and the iterative preterite in *-σκον* in Herodotus, as *φεύγεσκον*, which never has the augment. Perhaps the reason for these exceptions was that the forms of the 2<sup>nd</sup> plural and dual pluperfect (§ 836) and *φευγέσχετε φευγίσκετον* could have only one meaning, while *τρέπετε τρέπετον, τράπετε τράπετον, τρέψατε τρέψατον* could be either indicative or imperative. This made the augment useful to make the sense clear. In Sanskrit and Old-Persian there was the same ambiguity (e. g. Skr. *bhārata* = *ābharata*, and also imperative); and there too a desire for clearness may have caused the augmented forms to become by degrees the only mode of expressing past action.

In all other branches of our group unaugmented forms gained the day. The scanty and obscure remnants of the augmented class have already been given. Examples of unaugmented forms are:

Latin. *-bam* in *planta-bam* for *\*fu-a-m* 'I was' (§ 583). *dixit*: Gr. *δειξε ἔ-δειξε* (§§ 823, 867. 3). *scidit*: Skr. *chidá-t á-chida-t* (§§ 523, 528, 867. 5).

Old-Irish. *s-aorist ro-char* 'he loved' for *\*-caras-t* (§ 840).

Old High German. *teta* O.Sax. *deda* 'I did', if it is an imperfect like Greek *τίθην ἰ-τίθην* (§§ 545. 886), and O.H.G. O.Sax. *wissun* 'they knew', if it be for *\*uits-ut* (§ 837). Compare Kluge in Paul's Grundr. I 375.

Lithuanian. *būvo* 'he was' for \**bhuuā-t*: cp. Lat. *-bat*; *minė* 'he thought, devised' for \**mynē-t*: cp. Gr. *μάνη ἐ-μάνη* (§ 587). Old Church Slavonic. *bě* 'he was' for \**bhyē-t*: cp. Gr. *φύη ἐ-φύη* (§ 587); aor. *vezū* 'I carried, vexi': Skr. *vāha-m á-vaha-m* (§ 514); *s*-aorist *děchū* 'I laid': Skr. *dhāsam á-dhāsam* (§ 812).

## FORMATION OF THE TENSE STEM.<sup>1)</sup>

### GENERAL REMARKS.

§ 484. In classifying forms of a verbal system the grammars regard meaning rather than form. The result is that forms which are closely connected in structure and in derivation have often to be kept apart, and at the same time

1) Many works on the Present Stem (Imperfect-Present and Aorist-Present) include a more or less general discussion of tense formation, and it is not always easy to choose where to name them. For this reason, works on the Present Stem will here be included along with those on Tense-Formation in general. For works on the *sio*-Future, see § 747; for the *s*-Aorist § 810; for the Perfect, § 848 (the Germanic weak preterite § 907).

Indo-Germanic. L. Tobler, *Übergang zwischen Tempus und Modus, ein Capitel vergleichender Syntax im Zusammenhang mit Formenlehre und Völkerpsychologie*, Zeitschr. f. Völkerpsych. II 29 ff. S. H. A. Herling, *Vergleich. Darstellung der Lehre vom Tempus und Modus*, Hanover 1840. L. Meyer, *Über Tempusbildung und Perfecta mit Präsensbedeutung*, Benfey's *Orient und Occident* I 201 ff. F. H. Trithem, *On the Formation of the Past Tense in certain of the Indo-European languages*, *Proceed. of the Philol. Soc.* I (1844) pp. 273 ff. G. Gerland, *Intensiva und Iterativa und ihr Verhältnis zu einander*, Leipz. 1869. H. Osthoff, *Über Aoristpräsens und Imperfectpräsens*, *Paul-Braune's Beitr.* VIII 287 ff. F. Hartmann, *De aoristo secundo*, Berl. 1881. O. Hoffmann, *Das Präsens der idg. Grundsprache in seiner Flexion und Stammbildung*, Gött. 1889. The Author, *Zur Geschichte der präsensstammbildenden Suffixe*, *Sprachwiss. Abhandl. aus G. Curtius' Gramm. Gesellsch.* 1874 pp. 153 ff. Bartholomae, *Altindisch āsiṣ* > lateinisch *erās*. *Stud. zur idg. Sprachgesch.* II 61 ff. J. Schmidt, *Die ursprüngl. Flexion des Optativs und der auf ā auslautenden Präsensstämme*, *Kuhn's Zeitschr.* XXIV 303 ff. G. Curtius, *Die Verstärkungen im Präsensstämme*, *ibid.* I 259 ff. A. Kuhn, *Über die durch Nasale erweiterten*

Brugmann, *Elementa*. IV.

others which are in structure and derivation quite distinct must be brought together. Questions of use belong to Syntax. Here we have to examine the structure of the Indo-Germanic verb, and to identify what is morphologically the

Verbalstämme, *ibid.* II 392 ff., 455 ff. H. Osthoff, Über eine bisher nicht erkannte Präsensstambildung des Idg., Vortrag auf der Münchener Philologenvers. 1891 (Zeitschr. für deutsche Philol. XXIV 215 ff., Anzeiger für idg. Sprach- und Altertumsk. I 82 ff.). The Author, Die achte Conjugationsklasse des Altindischen und ihre Entsprechung im Griechischen, Kuhn's Zeitschr. XXIV 255 ff. J. H. Moulton, The *-nā*-Class of Unthematic Verbs, Amer. Journ. Phil. X 283 ff. A. Ludwig, Die Verba auf [lat.] *-erare* [germ.] *-izon*, Kuhn's Zeitschr. XVIII 52 ff. Th. Benfey, Einige ursprüngliche Causalia aus Bildungen durch sanskritisch *payā*, *ibid.* VII 50 ff.

Aryan. The Author, Die siebente Präsensklasse des Arischen, Morph. Untera. III 148 ff. Bartholomae, Zur dritten, achten, neunten Präsensklasse, zur Desiderativbildung [im Arischen], Ar. Forsch. II 69 ff., 86 ff., 89 f., 90 ff. Whitney, Numerical Results from Indexes of Sanskrit Tense- and Conjugation-Stems, Proceed. Amer. Or. Soc., May 1885, pp. XXXII ff. Lanman, On Multifiform Presents and on Transfers of Conjugation in the Sanskrit Verb System, *ibid.* pp. XXXVI ff. Whitney, On the Classification of the Forms of the Sanskrit Aorists, *ibid.* 1875—76 pp. XVIII f. The Author, Über einige ai. Verba der fünften und neunten Conjugationsklasse, Kuhn's Zeitschr. XXIV 286 ff. A. H. Edgren, On the Verbs of the so-called *tan*-class in Sanskrit, Proceed. Amer. Or. Soc., May 1885, pp. XXXIX f. Van den Gheyn, Note sur la 8<sup>e</sup> classe des verbes sanscrits, Brüssel 1880. *Idem*, Remarques sur quelques racines sanscrites de la 8<sup>e</sup> classe, Brussels 1884. *Idem*, Nouvelles recherches sur la 8<sup>e</sup> classe des verbes sanscrits, Brussels 1886. A. H. Edgren, On the propriety of Retaining the Eighth Verb-Class in Sanskrit, University Studies Published by the Univ. of Nebraska I 1 (1888). S. Goldschmidt, Bildungen aus Passiv-Stämmen im Prākrit, Zeitschr. der deutsch. morg. Gesellsch. XXIX 491 ff., XXX 779. Jacobi, Über unregelmässige Passiva im Prākrit, Kuhn's Zeitschr. XXVIII 249 ff. E. Wilhelm, Zum Übergang von der unthematischen in die thematische Conjugation [im Avest.], Bezenberger's Beitr. X 314 ff. *Idem*, De verbis denominativis linguae Bactricae, Jena 1878. Bartholomae, Zur fünften und neunten Präsensklasse [im Iran.], Bezenberger's Beitr. XIII 60 ff.

Greek and Latin. Herm. Schmidt, Doctrinae temporum verbi Graeci et Latini expositio historica, Halle 1836. *Idem*, De verbi Graeci et Latini doctrina temporum, Wittenb. 1842. A. Kerber, Significationes temporum verbi Graeci et Latini in uno conspectu collocantur, Halle 1864. Düntzer, Über die dem Griech. und Latein. eigenthümlichen Tempus- und Modusbildungen, Höfer's Zeitschr. f. die Wiss. d. Sprache II 78 ff.

same; and we must not be led into classifying forms according to their uses, or describing them by the terms which belong to syntax, except where this is possible without neglect of the forms as such, and without interfering with the terminology and general arrangement of the subject in this book.

Greek. G. B. Bonino, Il tema del presente nel verbo greco, Turin 1879. H. Malden, On connecting vowels in Greek, Trans. Philol. Soc. 1862—63 pp. 283 ff. G. Mahlow, Über den Futurgebrauch griech. Präsens, Kuhn's Zeitschr. xxvi 570 ff. W. Kühne, Das Causativum in der griech. Sprache, Leipz. 1882. H. Rumpf, Quaestionum Homeriarum specimen: De formis quibusdam verborum in  $\mu$  in aliam declinationem traductis, Giessen 1850. H. Ebel, Verkannte Präsensformen [*ῥεῖναι ἔχεται* etc.], Kuhn's Zeitschr. iv 201 ff. L. Meyer, Die homer. Formen des Zeitworts *εἶναι*, *ibid.* ix 373 ff., 423 ff. G. Meyer, Die mit Nasalen gebildeten Präsensstämme des Griechischen mit vergleichender Berücksichtigung der andern idg. Sprachen, Jena 1873. *Idem*, Die Präsens auf *-ώρηναι*, Bezzenberger's Beitr. I 222 ff. Max Müller, Die siebente [skr.] Conjugation im Griech., Kuhn's Zeitschr. iv 270 ff. The Author, Das *νν* in *ἔνναι*, *ῥώρηναι*, *κορένναι* und ähnl. Präsens, Kuhn's Zeitschr. xxvii 589 ff. R. Fritzsche, Über die Ausdehnung der Nasalclasse im Griech., Curtius' Stud. vii 381 ff. A. Stolpe, Iterativorum Graecorum vis ac natura ex usu Homeri atque Herodoti demonstrata, Bresl. 1849. G. Curtius, Die iterativen Präterita auf *-ον*, Kuhn's Zeitschr. i 27 ff. Max Müller, Die griech. Verba auf *πν*, *ibid.* iv 362 ff. I. Herrmann, De verbis Graecorum in *αθην* *εθεν* exeuntibus, Erfurt 1832. Wentzel, Qua vi posuit Homerus verba quae in *θω* cadunt? Oppeln 1836. G. Mekler, Griech. verba contracta mit langem Themavocal, in Beiträge zur Bildung des griech. Verbums (Dorpat 1887) pp. 1 ff. H. von der Pfordten, Zur Geschichte der griech. Denominativa, Leipz. 1886. L. Sütterlin, Zur Geschichte der verba denominativa im Altgriech. I, Strassb. 1891. Lobeck, De mutatione terminationum coniugationis circumflexae, Königsb. 1845. G. Curtius, Zur Geschichte der griech. zusammengezogenen Verbalformen, Curtius' Stud. iii 377 ff. B. Mangold, De diectasi Homerica, imprimis verborum in *-αω*, *ibid.* vi 139 ff. F. D. Allen, The Epic Forms of Verbs in *αω*, Transact. of the Americ. Philol. Associat. iv (1873) pp. 1 ff. J. Wackernagel, Die epische Zerdehnung, Bezzenberger's Beitr. iv 259 ff. Inama, Degli aoristi greci, Rivista di filol. ii 249 ff. L. Meyer, Griech. Aoriste, Berl. 1879. A. Zickler, De causis duplicis formae aoristi Graeci, 1865. Th. Nölting, Über den genetischen Zusammenhang des Aoristus II mit dem Perfectum II der griech. Sprache, Wismar 1843. The Author, Über einige griech. Präteritalformen mit *α* vor der Personalendung, Bezzenberger's Beitr. ii 245 ff. L. Doederlein, De aoristis quibusdam secundis, Erl. 1857.

§ 485. The first point to realise is that there never was any real difference between the Present stem and the Strong Aorist. There is no difference, for example, between the imperfect Skr. *á-bhā-t* Gr. *ἔ-φῆ* (*√bhā-* 'to

W. Schulze, Zwei verkannte Aoriste [*ἔαρον* und *ἔειπον*], Kuhn's Zeitschr. xxix 230 ff. Ebel, Reduplicierte Aoriste im Griech., *ibid.* II 46 ff. G. Curtius, Der erste Aorist des Passivs, *ibid.* I 25 ff. J. Wackernagel, Der Passivaorist auf *-σπν*, *ibid.* xxx 302 ff. W. Kühne, De aoristi passivi formis atque usu Homericis, Marburg 1877 and Güstrow 1878. Walker, Greek Aorists and Perfects in *-σα*, Class. Review, v 446 ff. Hatzidakis, Zur Präsensbildung des Neugriechischen, Kuhn's Zeitschr. xxvii 69 ff.

Albanian. G. Meyer, Das Verbum substantivum im Albanesischen, in M. Hertz zum 70. Geburtst., 1888, pp. 81 ff.

Italic. Corssen, Zur Bildung der Präsensstämme, in Beitr. zur ital. Sprachkunde pp. 475 ff. Cludius, Über die Bildung des Verbi *sum*, Günther und Wachsmuth's Athenäum II (Halle 1817) 136 ff. J. Darmesteter, De coniugatione Latini verbi *dare*, Paris 1877. Ph. Thielmann, Das Verbum *dare* im Lateinischen, Leipz. 1882. F. Fröhde, Die lat. Präsens auf *-lo*, Bezzenberger's Beitr. III 285 ff. K. F. Johansson, Några ord om de latinska verbalbildningarne med *n i* presensstämmen, Akadem. afhandlingar til prof. S. Bugge, Christiania 1889, pp. 21 ff. Ch. Ploix, Des verbes latins en *sco*, Mém. d. l. Soc. d. lingu., VI 399 ff. K. Sittl, De linguae Latinae verbis inchoativis, Archiv f. lat. Lexikogr. I 465 ff. C. Pascal, I suffissi formatori delle conjugazione latine, Revista di filol. XIX 449 ff. R. Thurneysen, Über Herkunft und Bildung der lat. Verba auf *-io* der 3. und 4. Conj. und ihr gegenseitiges Verhältniss, Leipz. 1879. C. Peter, Über die schwachen Verba der lat. Sprache, Rhein. Mus. III 95 ff., 360 ff. M. Bréal, Verbes dérivés latins, Mém. d. l. Soc. d. lingu. VI 342 ff. F. de Saussure, Sur une classe de verbes latins en *-eo*, *ibid.* III 279 ff. C. Pauli, Geschichte der lat. Verba auf *eo*, Stettin 1865. O. I. Fehrnborg, De verbis Latinis in *uo* divisas desinentibus, Stockholm 1889. C. Pauker, Die verba denominativa auf *-are*, Kuhn's Zeitschr. XXVI 261 ff., 415 ff. R. Jonas, De verbis frequentativis et intensivis apud comediae Latinae scriptores, (I) Posen 1871, (II) Meseritz 1872. *Idem*, Gebrauch der Verba frequentativa und intensiva in der älteren lat. Prosa (Cato, Varro, Sallust), Posen 1879 und 1884. C. Pauker, Die verba frequentativa, Kuhn's Zeitschr. XXVI 243 ff., 409 ff. Wölfflin, Die Verba frequentativa und intensiva, Archiv f. lat. Lexikogr. IV 197 ff. *Idem*, Die verba desuperlativa, *ibid.* II 355 ff. G. Curtius, Über die Spuren einer lat. *o*-Conjugation, Symbola philol. Bonn. 1864 pp. 271 ff. = Kleine Schriften II 133 ff. Wölfflin, Die verba desiderativa, Archiv f. lat. Lexikogr. I 408 ff. G. Curtius, De aoristi Latini reliquiis, Kieler Lectionsverzeichn. 1857—58 = Curtius'

show, disclose, inform') and the aorist Skr. *á-sthá-t* Gr. *ἔ-στη* (√*stā*- 'stand'); between the imperfect Skr. *á-druha-t* (√*dreugh*- 'deceive') Gr. *ἔ-γλυψε* (√*gleubh*- 'split, incise') and the aorist Skr. *budhá-nta* Gr. *ἔ-πύθη-το* (√*bheydh*- 'wake,

Stud. v 429 ff. Corssen, *Kein Aoristus II im Lateinischen*, in *Beitr. zur ital. Sprachk.* pp. 538 ff. F. G. Fumi, *Sulla formazione latina del preterito e futuro imperfetti*, *Progr. del R. Liceo Chiabrera in Savona* 1875—76.

Keltic. D'Arbois de Jubainville, *Etude sur le présent du verbe irlandais*, *Mém. d. l. Soc. d. lingu.* v 237 ff. Wh. Stokes, *The Neo-Celtic Verb Substantive*, *Trans. Phil. Soc.* 1885—87, pp. 202 ff. *Idem*, *The Old-Irish Verb Substantive*, *Kuhn's Zeitschr.* xxviii 55 ff. Windisch, *Das ir. praesens secundarium*, *ibid.* xxvii 156 ff. *Idem*, *Das ir. t-Präteritum*, *Kuhn-Schleicher's Beitr.* viii 442 ff. Thurneysen, *Das sogen. Präsens der Gewohnheit im Irischen*, *Idg. Forsch.* I 329 ff. Lottner, *Traces of the Italic imperfect in the Keltic languages*, *Trans. Phil. Soc.* 1859, pp. 31 ff. Thurneysen, *Zu den ir. Verbalformen sigmatischer Bildung*, *Kuhn's Zeitschr.* xxxi 62 ff. — Further on page 4, footnote.

Germanic. Amelung, *Die Bildung der Tempusstämme durch Vokalsteigerung im Deutschen*, Berl. 1871. Peterson, *Vom Ablaut mit bes. Rücksicht auf den Ablaut des starken Zeitworts im German.*, Lund 1877. A. Møller, *Die reduplicierenden Verba im Deutschen als abgeleitete Verba*, eine etymol. Untersuchung, Potsd. 1866. H. Lichtenberger, *De verbis quae in vetustissima Germanorum lingua reduplicatum praeteritum exhibeant*, Nancy 1891. G. Burghauser, *Idg. Präsensbildung im German.*, Wien 1887. J. von Fierlinger, *Zur deutschen Conjugation (Präsentia der Wurzelklasse, Zur westgerm. Flexion des verb. subst.)*, *Kuhn's Zeitschr.* xxvii 432 ff. H. Kern, *Over eenige vormen van 't werkwoord zijn in 't Germaansch*, *Taal- en Letterbode* v 89 ff. J. Schmidt, *Die german. Flexion des verbum substant. und das hiatusfüllende r im Hoehd.*, *Kuhn's Zeitschr.* xxv 592 ff. W. Wilmanns, *Die Flexion der Verba tuon, gān, stān im Ahd.*, *Zeitschr. f. deutsch. Alterth.* xxxiii 424 ff. Skladny, *Über das gotische Passiv*, Neisse 1873. Egge, *Inchoative or n-Verbs in Gothic*, *Amer. Journ. Phil.* vii 38 ff. Sievers, *Zur Flexion der schwachen Verba*, *Paul-Braune's Beitr.* viii 90 ff. Kögel, *Die schwachen Verba zweiter und dritter Classe*, *ibid.* ix 504 ff. The Author, *Die got. Imperativform hiri und die Denominativa von consonantischen Stämmen*, *Morph. Unters.* iv 414 ff.

Balto-Slavonic. G. Uljanov, *Značenija glagolnych osnov v litovsko-slavjanskom jazyké* (meaning of verbal stems in Lithu-Slavonic), *Russkij filol. věstnik* xxiv 105 ff., xxv 41 ff. O. Wiedemann, *Das litau. Präteritum*, ein Beitrag zur Verbalflexion der idg. Sprachen, *Strassb.* 1891. Leskien, *Die Präsensbildungen des Slavischen und ihr Verhältniss zum Infinitivstamm*, *Arch. f. slav. Philol.* v 497 ff. Miklosich,



notice, learn'). Often the same form is imperfect in one language and aorist in another; the forms *é-gene-t* (✓ *gen-gignere*) and \**é-dyke-t* (✓ *denk-* 'bite') are imperfect in Sanskrit (*ájanat ádaśat*), and aorist in Greek (*ἐγένετο ἔδανε*). Or the same form is both, in one and the same language; Skr. *á-pā-t* 'drank' is imperfect of the pres. *pā-ti*, and aorist of the pres. *pāba-ti*. What the meaning of a given form was, whether imperfect or aorist, depended on its relation to others. See Delbrück, *Ai. Verb.* p. 16, *Ai. Tempuslehre* p. 5. For our purpose, then, the stems of the present and the strong aorist go together; and where it is advisable to refer to the difference in the kind of action implied, we shall use the terms imperfect-present and aorist-present.

Some of the forms which in grammars of this or that language are called Future Indicative were originally Conjunctive; for example, Lat. *eri-s agē-s*. These will be found under Conjunctive (§§ 910 ff.). In form they belong to the Present. In the same place will be found the Idg. series of forms built up with the suffix *-sjo-*, as Skr. *dā-syāmi* Lith. *dā'-siu* 'dabo'. The *-sjo-* stands on the same level as *-so-* *-sko-* and other formative suffixes used in the present tense; it is probably made up of *-s(o)-* + *-jo-*, as *-njo-* is of *-n(o)-* + *-jo-* (§ 743). Thus these futures are treated under the Present Tense.

With the Present also should strictly speaking be classed the *s*-Aorist. Its characteristic *s* cannot be separated from the *s* which is so common in present and regular in future stems; and its whole inflexion follows the same principle as the present. The *s*-aorist would properly go with Class XIX of Present Stems (cp. §§ 655, 656). A separate chapter is given all the same to this

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Das Imperf. in den slav. Sprachen, *Sitzungsber. d. Wien. Akad.* LXXVII 5 ff. O. Wiedemann, *Zur Stammbildung der Verben auf -nqti*, *Arch. f. slav. Philol.* x 652 ff. W. Burda, *Ein Beispiel der Präsensstammbildung mittels ta im Slavischen*, *Kuhn-Schleicher's Beitr.* vi 392. Miklosich, *Verba intensiva im Altslowenischen*, *ibid.* I 67 ff. *Idem*, *Einfacher Aorist [in Old-Slovenian]*, *Sitzungsber. der Wien. Akad.* LXXXI 100 ff.

Aorist (§§ 810 ff.), but merely to assist in getting a general view of this large group of forms.

As to the proethnic Perfect, as *\*dedorke* = Skr. *dadārśa* Gr. *δέδορκε* ( $\sqrt{\text{derk-}}$  'see'), it is distinguished from present forms by its grade of ablaut in the singular indicative active, by some special personal endings in the indicative, and (if we include the verb infinite) by a peculiar formation in the participle active. The remaining forms of the perfect system, with which we must include the pluperfect, have exact counterparts in the system of the present, and nothing but its use can tell us whether a given one of these forms is perfect, present, or aorist; even the reduplication with *e* is not confined to the perfect (§ 471 pp. 15 f.). Often the kind of action denoted is so little obvious, that grammarians doubt whether to class certain forms under Perfect or Present Stem (cp. Delbrück, *Altind. Verb.* 122 f., Whitney's *Sanskrit Gram.* § 868, Curtius *Verb II* 24 f.). It is clear that notwithstanding these points of contact between the two classes, a special chapter must be given to the perfect, on account of the peculiarities which it has.

We therefore divide Verb Forms, from the point of view of the Formation of these Tenses, into three groups:

- I. Present (including Imperfect- and Aorist-Present).
- II. s-Aorist.
- III. Perfect.

§ 486. Before we proceed to our subject in detail, two distinctions must be explained which are usually made, and to which some attention must be given in discussing Tense Morphology. These are (1) the distinction between *Primitive* or *Primary* verbs, and *Derivative* or *Secondary* verbs (*Denominative* or *Deverbative*): (2) that between *Root-Determinatives*, and *Tense-Suffixes*, or the elements used in forming a tense stem.

§ 487. First — *Primitive* and *Derivative* Verbs. Primitives, such as *\*es-ti* 'est' and *\*age-ti* 'agit', are contrasted with two classes of derived verbs: (1) a class which in the formation of

the stem is wholly verbal, as much as are the primitives; as Sanskrit Desideratives and Intensives (*nī-nī-ṣa-ti nē-nī-yá-tē* from *náya-ti* 'leads'), and Inchoatives in Latin (*gemiscō* from *gemō*): (2) those which clearly contain a Noun Stem, called Denominatives; as Skr. *gātu-yá-ti* 'procures access' from *gātú-ṣ* 'access', Gr. *ποιμαίνω* 'I tend' from *ποιμήν* 'herdsman', Lat. *planta-t* from *planta*.

(1) The formation of Desideratives, Inchoatives, Intensives, Iteratives, Frequentatives, Causatives and the rest is in principle absolutely the same as that of the so-called Primitive verbs connected with them. There is a distinction, however, in the *meaning* of the present tense; in these verbs the present had a second special meaning in addition to that of time. This distinguished them from the primitives, which had a simpler meaning in the present, and the formation with some special meaning became a more or less fertile type. But they were not originally *derived* from their primitives for the express purpose of conveying this new meaning; the new meaning, indeed, does not always date from the proethnic stage at all, but belongs to a later period, and it often has nothing to do with the form, but depends on other circumstances. This is the case with Lat. inchoatives in *-scō* (§ 674). Thus it is clear that we cannot use this different meaning as a principle of classification; our aim is historical, and we base our classification on the conditions which prevailed in the proethnic stage, and as far as possible on etymology. We must then be content to point out the special meaning where it is of any importance, and, wherever it is possible, to explain how the meaning came in.

(2) It is less easy to classify the second group of forms, and to find out how far indicative stems, which we see combined with personal endings into a word, are purely verbal, and how far they are wholly or partly nominal. If we could only see which were based on noun stems and which derived from verbs, this would of course be the main principle of distinction.

There is no manner of doubt that the Idg. languages had

not only denominative verbs with an additional suffix between stem and personal ending — such as Skr. *gātu-yá-ti* *apas-yá-ti* ('is active', from *ápas-* 'work') Lith. *pāsako-ju* ('I recount' from *pāsaka* 'account'), which have *-jo-* between stem and ending — but also others where the personal suffix was added immediately to the noun stem. Such forms are Lat. *plantā-s* *planta-t* etc. from *planta*, O.H.G. *salbō-s* 'thou anointest' *salbō-t* etc. from *salba* 'ointment', Lith. *jūsto* 'he girds' *jūsto-me* from *jūsta* 'girdle', Aeol. *τῖμα-μεν* 'we honour' from *τῖμά* 'honour'. Also Skr. *mārga-ti* 'tracks, traces' from *mārga-s* 'path, track', *phala-ti* 'bears fruit' from *phāla-m* 'fruit', Gr. *θέρμι-το* 'grew warm' from *θερμός*, ἔχραυσε 'was useful' beside *χραιομέω*, Skr. *jīva-ti* Lat. *vīvi-t* O.C.Sl. *žive-tū* 'lives' from *jī-vā-s* *vī-vo-s* *ži-vū* 'alive'. With very good reason, all forms with a thematic vowel, and therefore all presents formed by *-o-* *-no-* *-to-* *-jo-* etc., have been explained as noun-stems with added personal endings (so, for example, Curtius Verb I<sup>2</sup> 14 f., 161, 239, 296): as specimens take Skr. *āja-ti* 'drives' Gr. *ἄγει* Lat. *agi-t* with Skr. *ajā-s* 'driver' Gr. *αἰός* Lat. *prōd-igu-s*; Skr. *paṇa-tē* 'buys' with *paṇa-s* 'wager, stipulation' Lith. *peṇa-s* 'profit' (I § 259 p. 212), Skr. *vēna-ti* 'yearns' with *vēnā-s* 'yearning', Goth. *frāthni-þ* 'asks' with Skr. *praśnā-s* 'question'; containing *-yno-* *-eno-* *-ono-* (Class XIV): compare Skr. *kṛpāṇa-te* 'he acts pitifully, begs' with *kṛpāṇā-s* 'pitiful, poor', Gr. *θηγάει* 'sharpens' with *θήγανον* 'something to sharpen with, whetstone', Goth. *us-lūkni-þ* 'opens itself' with *us-lūkn-s* 'open', Lith. *kūpinu* 'I heap up' with *kūpina-s* 'heaped'; Skr. *vēṣṭa-tē* 'turns round' with *vēṣṭā-s* 'bond, noose', Gr. *ἐβλαστε* 'grew, sprouted' with *βλαστός* 'bud, sprout'; Skr. *pūya-ti* 'stinks' with *pūya-m* 'ill smelling discharge, matter'. Even some non-thematic and primitive stems have the same kind of relation to noun stems. For example take Skr. *dhṛṣṇu-mās* 'we are brave' and *dhṛṣṇú-ṣ* 'brave'. The root-extending suffix *-a-*, in *\*bhuy-a-* *\*bhy-a-* (Lith. *būvo* Lat. *-bat*), *\*tr-a-* (Skr. *trā-sva* imper. 'preserve, save', Lat. *in-trā-mus* *trā-ns*) it seems necessary to identify with the feminine suffix *-a-*, compare Skr. *jī-jyāú* 'he has overcome' (fut. *jyā-*

-*syā-ti* etc.) Gr. Ion. *βε-βίη-ται* (aor. *βίη-σασο* etc.) with fem. Skr. *jyā- jiyā-* 'power, superiority' Gr. *βία* from  $\sqrt{\text{gei-}}$  (Skr. *jáy-a-ti ji-ná-ti* and others). So also -*es-*, which extends the root in *\*u-es-* 'clothe' (Skr. *vás-iṣ-* Gr. *ἐνί-εσται* and other words) must be the same as the neuter suffix -*es-*, and the tense-formative -*as-* in Skr. *á-jāriṣ-ur* 'they have grown old' the same as -*as-* the neuter suffix (Gr. *γηρας*). Many other proofs will meet us in the course of our enquiry.

It need hardly be said that these denominatives or noun-verbs did not all appear at the same time. The different types of formation belong to very different periods; and in the earliest strata, e. g. in verbs of Class II such as Skr. *ája-ti* Lat. *agi-t*, their noun origin was forgotten even in the proethnic language.

But of what verbs, then, can we be certain that when their stem was fused with a personal pronoun it was a verb and not a noun? Of none at all. Even where the stem is the bare root, reduplicated or not, as in *\*es-ti* *ἔσ-τι*, *\*stā-t* *στᾷ*, *\*bhibhai-ti* Skr. *bibhē-ti*, the stem may be regarded as a *nomen actionis* or *agentis* (cp. the Root Nouns, II §§ 159 ff., pp. 478 ff.).

In the formation of those verbs which are traditionally called Denominative there is nothing to distinguish them from what are classed as primary verbs. Lat. *plantā-s* is just like *intrā-s hiā-s*, Aeol. *ἐτμᾶ-μεν* like *ἔδρα-μεν ἔτλη-μεν*, Lith. *jā'sto* like *bijōs lādo*. Even the present formation with -*io-* is nothing peculiar to the denominative class. We see in Skr. *apas-yá-ti pṛtanā-yá-ti* Gr. *ὀνομαίνω* etc. the same present secondary suffix -*io-* as we see in reduplicated forms such as Skr. *dēdiṣ-yá-tē* Gr. *γαργαίω* (Class XXVII), in forms such as Skr. *gr̥bha-yá-ti*, pass. *trā-yá-tē*, Gr. *δρῶ* for *\*δρα-ιω*, *ἰῶμαι* for *\*ioā-ιο-* (Class XXVIII), and in futures such as Skr. *ta-s-yá-tē vēd-iṣ-yá-ti* (Class XXX). Lat. *plantō* (for *\*plantā-iō*) Skr. *pṛtanā-yá-ti* are related to Lat. *plantā-s* Lith. *jā'sto* just as Lat. *intrō* (for *\*intrā-iō*) Skr. *trā-yá-tē* to Lat. *in-tra-s* Skr. *trā-ti trā-sva*, as Skr. *dēdiṣ-yá-tē* to *dēdiṣ-tē*, and as Skr. fut. *vēdiṣ-yá-ti* to aor. *á-vēdiṣ-ma*.

That the term Denominative Verbs cannot be restricted to one special mode of inflexion is clear from many other instances where verbs have been derived from nouns by simply imitating the inflexion of any Primary Verb. Primary verbs in *-ēð* (Causatives, and Intensives or Iteratives) were the model for Skr. *mantrāya-tē* 'he takes counsel, advises' from *mántra-s*, and Goth. *fulljan* O.C.Sl. *plūni-ti* 'to fill' from *full-s* *plūnū*. In Gothic, primary verbs like *af-lifnan* were the model for *fullnan* 'to become full' from *full-s*; in Lithuanian, *kūpin-ti* etc. were the model for such derivatives as *lūksmin-ti* 'to make cheerful' from *lūksma-s*, and *virstū virsti* etc. for *gelstū gelsti* 'to become yellow' from *gelta-s*. These and similar re-formations will be discussed in § 793. They were due to the fact that there were nouns from the same root as some of the primary verbs, and from these they were believed to be derived. Then real denominatives were formed and used along with these apparent ones.

Thus in our classification of verbs, which depends first and foremost upon differences of inflexion, no use can be made of the traditional distinction between Primary and Denominative.

Even if the term Denominative were to be restricted to its common application it would be misleading. The feeling of a speaker for his language can give no help here. Often it cannot be made out whether the speaker regarded a given form as Denominative or not; his feeling often changed according to suggested associations; and if feeling of this sort were made the standard, we should often enough be led to class with Denominatives verbs which were only so by false analogy, and to class as Primary some which were undoubtedly derived from a noun. If again we took as our standard not the feeling of the speaker, but the actual formation of the words, we should be no nearer to getting a settled boundary line. It is easy to say, let those verbs be called denominative which contain noun formative suffixes, thus showing their noun origin, words that is like Gr. *τῆμάω* from *τῆ-μή*, *ποιμαίνω* from *ποι-μήν*, or Goth. *fullnan* from *full-s* (ground-form *\*pl-no-s*). But not

to mention that this criterion excludes verbs derived from root nouns, little is gained by this mode of classification; for the task of historical grammar is not so much to analyse the forms and to describe their etymological structure, as to discover their origin and growth. In numberless instances doubts arise as to the correctness of our terminology. The commonest example is that of two classes of verbs running together, a primary and a denominative; e. g. in Greek, verbs in *-έῖδ* and verbs in *-εῖδ* both become *-έω*; in Germanic, verbs in *-ἰδ* *-έῖδ* and those in *-εῖδ* *-ιῖδ* both became (Goth.) *-ja*; in Lithuanian, verbs in *-έῖδ* and verbs in *-α-mi* (*-α-ἰδ*) both became *-au* (inf. *-y-ti*). Here the question whether a given verb is primary or denominative is absurd, because it may quite well have been both. For instance, Lith. *bradaũ bradýti* 'to wade about' may be derived both from *bradà* subst. 'wading' on the analogy of *jũ'stau jũ'styti* 'to gird', a denominative from *jũ's-ta* 'girdle', and from *bredũ* 'I wade' on the analogy of *-manaũ -manýti*, the old "primary" *έῖδ*-byeform of *menũ* 'I remember'; and Greek *τροπέω* may come from *τρόπος* on the analogy of *νοστέω* : *νόσ-τος*, and from *τρέπω* on the analogy of *φορέω* (= Skr. *bhārāya-ti*) : *φέρω*.

But however faulty our grammatical terminology may be, we cannot afford to dispense with it altogether in a book like this. I shall keep the term Denominative for verbs derived from nouns in the later periods, when the verb stem was still more or less felt to be originally a noun; for instance, Skr. *gātu-yá-ti*, Gr. *τιμάω*, and Lat. *planta-t*.

§ 488. Turn we now to the distinction drawn between Root-Determinatives and Suffixes or other elements used in forming the Tense Stem.

What is usually understood, or may be understood, by the term Root-determinative has been set forth in II § 8 Rem. 2 pp. 20 f. A reference should be added to Curtius, Greek Etymology<sup>2</sup> pp. 59 ff., and Fick, Wörterb. IV<sup>3</sup> 44 ff.<sup>1</sup>

1) Another work, systematic, and valuable in spite of much bold conjecture, is Per Persson's *Studien zur Lehre von der Wurzelerweiterung*

These elements may appear in any part of the verb. For instance, from Idg. \**rē-dh-* 'take counsel' come Skr. *á-rādha-t rādhnó-ti rādhya-tē rātsyá-ti, rarādh-a, á-rātsī-t, rāddhá-s rāddhō* etc.; from Idg. \**sr-ey-* *sr-u-* 'flow' come Skr. *sráva-ti, sraviṣyá-ti, susráv-a, srutá-s* etc. But they are sometimes found only in present or aorist forms, and disappear in the rest; as Lat. *per-cellō* for \**-cel-dō* beside perf. *-culi*, Lith. *vir-du* 'I boil' beside pret. *viriaũ* inf. *viř-ti*, O.C.Sl. *ži-va* 'I live' beside aor. *ži-chũ* inf. *ži-ti*.<sup>1)</sup> Again, present formative-suffixes, to use the stock phrase, spread beyond their own proper area both in the original language and later. These two reasons make it impossible always to keep Root-Determinatives distinct from Present Formative-Suffixes; the origin of both, by the way, is equally obscure. The tense which we call Present was almost always the foundation for the whole structure of the Verb and its associated noun forms; and the spread of root determinatives over all the verbal system is due to the same principle which from Skr. *pī-nva-ti* 'fattens' makes the perfect *pininva* and the participle *pinvi-tá-s*, and makes Skr. *á-yuṣṭk-ṣ-mahi* Lat. *jūnx-ī* Lith. *jūnk-siu* from *yuṣṭē jungō jūngiu* (✓*jeuḡ-* 'iungere').

There is something else which shows the impossibility of carrying out the usual distinction between Determinatives and ordinary Inflexions. In discussing the inflexion of the present in primary classes of verbs, it is too common to find the *first syllable* of a form taken for the uninflected kernel of it. Because in \**bhereti* 'fert', the syllable *bher-* is this kernel, that is, the root, therefore in \**treseti* (Skr. *trásati* Gr. *τρέσι*) the syllable *tres-* is called the root; then, because there is not the same syllable in Skr. *tar-alá-s* 'moving to and fro,

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und Wurzelvariation, Upsala 1891. This has reached me too late for anything more than occasional use. With his treatment of the main questions of principle as set forth on pages 202 and following, I agree.

1) In Lat. *vi-vō* too the *vo-*suffix was once confined to the present. *vīzī victum* are re-formatēs, for \**vi-sī* \**vi-tum*. See Osthoff, Paul-Braune's Beitr. viii 274; Stolz, Lat. Gr.<sup>2</sup> p. 383.



trembling' Gr. *τρ-έμω* Lat. *tr-emō* Lith. *tr-imù* 'I tremble', -*es-* is called a "determinative", whilst in Skr. *vás-tē* 'clothes himself' Gr. *ἐπί-εσται* ( $\sqrt{\epsilon\sigma\tau\alpha\iota}$ , in Lith. *au-nù* Lat. *ex-uō*) -*es-* is not so called because these verbs are looked upon as parallel to forms like \**es-ti*. But inasmuch as \**tres-* and \**ues-* run right through the whole system of their verbs, they have become "roots". And there is no more reason for separating Skr. 1<sup>st</sup> sing. *tr-ásē* *v-ásē* from 1<sup>st</sup> sing. *yaj-asē* *ṛñj-asē* than for separating (say) \**bhu-ō* (Lat. -*bō* O.C.Sl. 3<sup>rd</sup> pl. *bq*) Skr. *á-hv-a-t* Gr. *ἐ-πλ-ε* from \**bher-ō* (Gr. *φείρ-ω*) Skr. *á-vid-a-t*. We always hear of an "s-suffix" in such words as Skr. *yaj-asē*; but why? Simply because the ending -*asē* is not the first syllable of the word. The *ē* of \**pl-ē* 'fill' (Skr. *prá-si* Gr. *πλῆ-το* Lat. -*plē-s*) is called part of the *Root*; but it is the same *ē* which we have in \**mpn-ē* Gr. *ἐ-μάνη* Lith. *mìn-ē*), \**tak-ē* (Lat. *tac-ē-s* O.H.G. *dag-ē-s*), where it is called *Inflexion*. And the "determinative" -*dh-* is called inflexional in Gr. *φλεγέθω* *νεμέθομαι* *πελάθω*, but not in *ἐ-δρα-θον* *ἐ-δαρ-θον*, or *ᾄχ-θο-μαι*. The question whether a verbal element, which can be analysed no further, is or is not a separate syllable has, it is true, some importance; for it influenced the grouping of the forms in the speaker's memory, and this affected the developement of a language in many ways: e. g. the root in Lith. *v-ējù* O.C.Sl. *v-ŷja* 'I wind, turn' (= Skr. *v-áya-ti* 'weaves'), since it formed in itself no syllable, did not follow the course taken by the other verbs in -*éjō* (Class XXXII) in Balto-Slavonic. But this cannot justify the making a distinction, as is so often done, between things which are clearly connected. Dealing as we do with the parent language, and from this point investigating the growth of the Verbal System, we must discuss together Skr. *v-ásē* and *yaj-asē*, Greek *πλ-ῆ-το* *ἐ-βλ-η* and *ἐ-μάν-η* *ἐ-βάλ-η*.

If, as it seems right to do, a special Present Class is given to \**és-ti* 'is' (Skr. *ás-ti*,  $\sqrt{\epsilon\sigma}$ ), another to \**uema-ti* 'vomits' (Skr. *vámi-ti*,  $\sqrt{\upsilon\epsilon\mu}$ ), and a third to \**bhsē-ti* 'chews up, devours' (Skr. *psá-ti*,  $\sqrt{\upsilon\text{bha}^*s}$  seen in *bá-bhas-ti*), it is only consistent to distinguish each of the following as another class of Present

Stems: — a *u* : *eu*-class for Skr. *sr-áva-ti* Gr.  $\acute{\rho}\text{-}\acute{\epsilon}(f)su$  'flows' Skr. *á-su-srō-t* from  $\checkmark ser$ - seen in Skr. *sí-sar-ti*, for Skr. *dr-áva-ti* 'runs' *á-du-dr-uva-t* from  $\checkmark der$ -, seen in Skr. *dr-á-ti* *dr-ama-ti* 'runs', and others; an *m*-class for Skr. *dr-ama-ti* Gr.  $\acute{\epsilon}\text{-}\delta\rho\text{-}\alpha\mu\omicron\text{-}\nu$  from the above mentioned *der*-, for Gr.  $\tau\rho\text{-}\acute{\epsilon}\mu\omega$  Lat. *tr-emō* Lith. *tr-imù* 'I tremble' from  $\checkmark ter$ -, seen in Skr. *tar-alá-s* 'moving to and fro, trembling' *tr-ása-ti* 'trembles', and others; a *u*-class (probably connected closely with the *u* : *eu*-class) for Skr. *jí-va-ti* Lat.  $vī\text{-}vī\text{-}t$  O.C.Sl.  $\acute{z}i\text{-}ve\text{-}tū$  'lives' from  $\checkmark gei$ -, seen in Avest. *gay-a* 'life' *jy-aiti*- 'life' Gr.  $\zeta\eta$  (for  $*g\acute{i}\text{-}\acute{\epsilon}$ ), O.C.Sl.  $\acute{z}i\text{-}ti$  'to live', for Avest. *ni-šaurvaiti* 'defends' Skr. *dhárva-ti* 'harms' *bhárvati* 'chews, destroys' etc. In the same way we come to a *p*-class, a *bh*-class, a *k*-class, and so forth. But this principle will not be consistently carried out, for two reasons. First, in these and many similar classes which might be made only a few examples occur, and thus for our period such formative elements as these can hardly be said to have any real productive power. Secondly, any attempt to make such a classification complete would lead us into labyrinths of root-analysis which would properly be without the scope of a compendium like the present. Roots with this kind of Determinatives, then, which we do not place in any separate class, we shall generally assume to be incapable of further analysis; and thus we place (say) Gr.  $\tau\rho\text{-}\acute{\epsilon}\mu\omega$  in the same division as  $\nu\acute{\epsilon}\mu\omega$  and  $\gamma\acute{\epsilon}\mu\omega$ .

§ 489. The formation of the Moods, the stems of the Injunctive, Conjunctive, Optative, and Imperative, will follow that of the Tense Stem (§§ 909 ff.). It must however, be here pointed out that the elements which are generally regarded as mood-formative are sometimes etymologically the same as in the indicative. Injunctive and Indicative forms, of course, cannot be separated. And it is beyond all doubt that the short Conjunctive vowel (Gr.  $-\epsilon\text{-}$   $-\omicron\text{-}$ ), as in  $*es\text{-}e\text{-}ti$  Skr. *ásati* Lat. *erit* (indic.  $*es\text{-}ti$  'est'), Hom.  $\acute{\alpha}\text{-}\lambda\epsilon\text{-}\tau\alpha\iota$  (indic.  $\acute{\alpha}\lambda\text{-}\tau\omicron$  'sprang'), is the same as what is called the thematic vowel in the Indicative (as  $*ag\text{-}e\text{-}ti$  Skr. *ájati* Lat. *agit*).

Further, I hold that the conjunctive vowel *-ā-* in Lat. *ferā-s* etc. is the same as *-ā-* found after weak root-forms in the indicative (Classes X and XI), and also the same as the *ā* which forms feminine nouns (§ 487 pp. 41 f.); thus Lat. *fu-ā-mus* belongs to the same class of words as the Indic. Lat. *-bā-mus* (for *\*fū-ā-mos*) and Lith. *būv-o-me* (§ 578), and that Lat. *poscat* for *\*porscā-t*, the indic. O.H.G. *forscōt* 'demands', and the Skr. fem. *prchā* 'question' (common ground-form *\*prk-skā-*) in point of etymology must all go together. So also the Italic conjunctive *-ē-* is to be identified with the Indicative *-ē-* (Classes X and XI), and so forth.

In all these cases it were proper to keep together whatever forms are etymologically akin. But if we did so, a student who is used to the practice observed hitherto, of arranging forms according to their function, would hardly be able to find his way. So I prefer to give this up, and simply call attention to etymology and structure where it is convenient to do so.

## THE PRESENT STEM.

### IMPERFECT PRESENT AND AORIST PRESENT.<sup>1)</sup>

§ 490. The classes of the Present Stem are very commonly divided into two groups:

- (1) *Thematic*, or verbs in *-ō* (Bopp's First Main Conjugation); and
- (2) *Non-thematic*, or verbs in *-mi* (Bopp's Second Main Conjugation).

The first group has in the Indicative *-o-* or *-e-* just before the personal ending; but *-ō* is the ending of the 1<sup>st</sup> person singular. These vowels were distributed amongst the persons of the singular and plural (we may leave the dual out for the present) in very much the same way as they are in Greek; *-e-* in the 2<sup>nd</sup> person of both, and the 3<sup>rd</sup> singular, *-o-* in the 1<sup>st</sup> persons (but 1<sup>st</sup> sing. pres. act. *-ō*) and in the 3<sup>rd</sup> plural:

1) For works bearing on this subject, see footnote to page 33.

compare 2<sup>nd</sup> sing. *ἔφερε-ς φέρε-αι ἔφερε-ο* (for the indic. pres. act. cp. Goth. *baíri-s*), 2<sup>nd</sup> pl. *φέρε-τε ἔφερε-τε φέρε-σθε ἔφερε-σθε*, 3<sup>rd</sup> sing. *ἔφερε φέρε-ται ἔφερε-το* (for the indic. pres. act. cp. Goth. *baíri-þ*); 1<sup>st</sup> sing. (*φέρω*) *ἔφερο-ν (φέρω-μαι ἔφερό-μην)*, 1<sup>st</sup> pl. *φέρω-μεν ἔφερο-μεν φερό-μεθα ἔφερό-μεθα*, 3<sup>rd</sup> pl. *φέρου-ν (φέρουσι) ἔφερου-ν φέρο-νται ἔφερο-ντο*. The variation *-e* : *-o* is the rule in all the present *o*-suffixes except *-ιο-*, where instead of it there is sometimes *-i-* *-ι-*; see § 702. The Conjunctive shows a long vowel before the personal endings, as 1<sup>st</sup> and 2<sup>nd</sup> pl. Gr. *φέρω-μεν φερώ-μεθα φέρη-τε φέρη-σθε* Lat. *fera-mas fera-tis* Skr. *bhára-ma bhára-mahai bhára-tha bhára-dhvai*. The Optative has the thematic vowel *-o-*, and between it and the personal ending *ι*, which, when the personal ending began in a consonant, combined with the thematic vowel into a diphthong and a single syllable, as 2<sup>nd</sup> sing. Gr. *φέρου-ς* Goth. *baíraí-s* Skr. *bhárē-ṣ*.

To the second group belong all present stems which have no thematic vowel before the personal ending in the Indicative. The personal endings were mostly the same as in the first group. There is a strange difference in the first person singular pres. indic., which had in the parent language, as it has in Greek, the ending *-mi*; Gr. *εἰ-μι τίθη-μι δάμνη-μι στέργω-μι* etc., not like *φέρω βόσχω τύπτω πορέω*. In most non-thematic conjugations, the indicative had, and retains, a vowel grading; the syllable just before the personal ending, whether root or suffix, had the strong grade (and accent) in the singular of the active, and the weak grade (no accent) in the active dual and plural: compare Skr. act. sing. 1<sup>st</sup> pers. *dvēṣ-mi* ('I hate') *á-dvēṣ-am* 2<sup>nd</sup> *dvēk-ṣi á-dvēṣ* 3<sup>rd</sup> *dvēṣ-ṭi á-dvēṣ*, but pl. 1<sup>st</sup> pers. *dviṣ-más á-dviṣ-ma* etc., dual 1<sup>st</sup> pers. *dviṣ-vás á-dviṣ-va* etc., mid. sing. 1<sup>st</sup> pers. *dviṣ-ē á-dviṣ-i* etc.; act. sing. 1<sup>st</sup> pers. *kṛ-ṇō-mi* ('I make') *á-kṛ-ṇav-am* 2<sup>nd</sup> *kṛ-ṇō-ṣi á-kṛ-ṇō-ṣ* 3<sup>rd</sup> *kṛ-ṇō-ti á-kṛ-ṇō-t*, but pl. 1<sup>st</sup> pers. *kṛ-ṇu-más á-kṛ-ṇu-ma* etc., dual 1<sup>st</sup> pers. *kṛ-ṇu-vás á-kṛ-ṇu-va* etc.; mid. sing. 1<sup>st</sup> pers. *kṛ-ṇv-ē á-kṛ-ṇv-i* etc. On the whole it may be said that the Conjunctive formed with *-e* and *-o* had the strong

stem in active and middle; as 3<sup>rd</sup> sing. act. *dvēš-a-t(i)* *kṛ-náv-a-t(i)* mid. *dvēš-a-tē* *kṛ-náv-a-tē*. The optative had in the singular active *-iē-* *-iē-*; in the other active forms and in the middle it had *-ī-* before personal endings beginning in a consonant and *-i-* or *-ī-* before a sonant; always with the weak form of the present stem: e. g. act. 1<sup>st</sup> sing. *dviš-yā-m* *kṛ-nu-yā-m* 1<sup>st</sup> pl. *\*dviš-ī-mā* *\*kṛ-nu-ī-mā* (what we actually find are *dviš-yā-ma* *kṛ-nu-yā-ma*, contrast Lat. *s-i-mus* beside *s-ie-m*), mid. 3<sup>rd</sup> sing. *dviš-ī-tā* *kṛ-nu-ī-tā* 1<sup>st</sup> sing. Avest. *tanuya* i. e. *ta-nu-iy-a*.

§ 491. Great as is the importance of the difference between thematic and non-thematic stems, it seems best not to make it the chief principle of distinction in what follows.

Every class of non-thematic presents with vowel gradation had parallel to it another class, which may be regarded as formed by adding the thematic vowel to the weak stem. Very often the same verb has both. Examples: Skr. *vēt-ti* (*vid-más*): *vid-ā-ti*, √ *uej*- 'know, learn'; Gr. *ἵστημι*: Skr. *tī-ṣṭh-a-ti*, √ *stā*- 'stand'; Skr. 3<sup>rd</sup> pl. *sá-śc-ati*: 2<sup>nd</sup> sing. *sá-śc-a-si* Gr. *ἵσθι*: √ *seq*- 'sequi'; Skr. *ṛ-nó-ti*: *ṛ-nv-ā-ti*, √ *er*- 'move'; Skr. *mṛ-nā-ti*: *mṛ-n-ā-ti* 'crushes'; Skr. *yunák-ti*: *yuñj-a-ti* Lat. *jung-i-t*, √ *jeug* 'iungere'. These two kinds hang closely together, and cannot be treated apart.<sup>1)</sup> I therefore choose a mode of

1) The closest contact between them is in the 3<sup>rd</sup> pl. active and the partic. pres. active. I now depart from my previous view set forth in I § 226 p. 193, II § 125 p. 395 (and elsewhere); I now hold with Streitberg (Idg. Forsch. I 82 ff.) that the strong suffix-forms of these parts of non-thematic verbs (3<sup>rd</sup> pl. act., and pres. act. partic.) were *-enti* *-ent* and *-ent-*, e. g. *\*s-énti* 'sunt' partic. nom. pl. *\*s-ént-es*. It is possible that there were variants, also of the strong grade, *-onti* *-ont* and *-ont-*. Then *-ent-*: *-ont-*: *-ṇ-* as in the gen. abl. sing. *-es*: *-os*: *-s* (III § 228 pp. 111 f.). If so, it is very possible that we should class together with the non-thematic conjugation e. g. Lat. *sunt* *sunt*, *sōns*, O.C.Sl. *sqŭ* (*sqŭti*) *sy*, and analyse them *\*s-onti* *\*s-ont-s*; that is to say, regard them as parallel to forms like *es-t* *jes-ti* (*jes-tū*). They would belong to both conjugations. This is, however, only a possibility; and I have accordingly treated forms with *-o-*, like Lat. *sunt*, in each case as thematic) and thematic only (below, §§ 492 ff.).

classification which takes as its principle some common points of structure or etymology other than the presence or absence of a thematic vowel. Thus one group will comprise presents which have a nasal-formative (as Skr. *mṛṇā-ti mṛṇā-ti ṛṇō-ti ṛṇā-ti yundā-ti yuñja-ti*); it is clear that this element was the same in all of them.

#### A. CLASSES I TO VIII:

SIMPLE ROOT, OR ROOT WITH -o-, FOR THE PRESENT STEM;  
SOMETIMES REDUPLICATED.

Class I: Simple Root used for the Present Stem.

§ 492. This class disappeared in most languages, leaving only a few traces. It is commonest in Aryan, as are all the non-thematic forms.

§ 493. Idg. *\*uél-mi* 'I choose, wish, will' 1<sup>st</sup> pl. *\*uḷ-més*: Skr. 3<sup>rd</sup> sing. mid. *á-vṛ-ta* opt. *vr-iyā-t* (3<sup>rd</sup> sing. mid. *vur-ī-ta*<sup>1)</sup>), Lat. 2<sup>nd</sup> sing. *vel* for *\*vel-s* (now a particle), 2<sup>nd</sup> pl. *vol-tis*, Lith. *pa-velmi* 'I will' 3<sup>rd</sup> sing. *pa-velt*. — With thematic vowel, Lat. *volō* (*\*uḷl-ō*) 3<sup>rd</sup> pl. *vol-u-nt*.

*\*gém-ti* 'goes, comes' 2<sup>nd</sup> pl. *\*gṇ-té*: Avest. 3<sup>rd</sup> sing. *jan-tū* Skr. 2<sup>nd</sup> pl. *ga-thá* 3<sup>rd</sup> sing. mid. *á-ga-ta* 3<sup>rd</sup> pl. *á-gm-an*, Armen. 3<sup>rd</sup> sing. *e-kn* = Skr. *á-gan*, Gr. 3<sup>rd</sup> dual *βᾶ-την*. Conjunctive: Avest. *jim-a-ḥ* (I § 94 p. 89), cp. indic. Goth. *qim-i-ḥ*. Optative: Skr. *gam-yā-m* A.S. *cyme* (= Goth. *\*kumjau*). — With thematic vowel. Avest. *g'm-a-ḥ* *γm-a-ḥ* O.Pers. mid. *a-gm-a-tā* Skr. opt. *gamé-t* i. e. *\*gṇm-ó-ī-t* O.H.G. 1<sup>st</sup> sing. indic. *cumu* i. e. *\*gṇm-ō*.

*\*éḷ-mi* 'I go' 1<sup>st</sup> pl. *\*i-més*: Skr. *ē-mi i-más* 3<sup>rd</sup> pl. *y-ánti*, Gr. *ἐλ-μι ἔ-μεν*, Lat. 2<sup>nd</sup> sing. *ei-s* *ī-s*, Lith. *ei-mi*; pret. *\*ēḷ-ṇi*: Skr. *áy-am* 3<sup>rd</sup> sing. *ái-t* 1<sup>st</sup> pl. *ái-ma*, Gr. *ἦ-α* 1<sup>st</sup> pl. *ἦ-μεν* (cp. § 480 p. 28, § 481 p. 30). Conjunctive: Skr. 3<sup>rd</sup> sing. *áy-*

1) Instead of *\*ur-ī-ta* (cp. partic. *ur-āṇā-s*), see I § 157 p. 141. On the other hand, the regular form with *v-* is seen in Avest. Gath. *vairī-maidi* for pr. Ar. *\*vṛr-ī*.

-a-ti *áy-a-t* (cp. indic. 3<sup>rd</sup> sing. mid. *áy-a-tē*, Lat. *eō* for \**eī-ō*, *eunt* for \**eī-o-nt(i)*). Optative: Skr. *i-yā-t*. Weak forms also found with *i-*, *iḡ-*: Skr. 1<sup>st</sup> pl. mid. *ī-mahē* opt. *ī-yā-t*, 3<sup>rd</sup> sing. mid. *ī-ya-tē* (Class XXVI),<sup>1)</sup> Gr. conj. 1<sup>st</sup> pl. *ī-o-μεν* (but cp. § 914); Skr. 1<sup>st</sup> sing. mid. *i-yē* (cp. Avest. *y-ōi*), Lat. *i-ēns*, Gr. perhaps 3<sup>rd</sup> pl. *ī-āσι* (cp. § 502). — With thematic vowel Gr. opt. *ī-o-ι* partic. *ī-ó-ντ-* pret. Hom. *ἦ-ε ἦ-ο-μεν* (cp. conj. *ī-o-μεν*), Pelignian *afāed* 'abiit' for \**af-īe-d* (§ 867. 5).

\**kēns-mi* 'I soothsay, praise, say' 1<sup>st</sup> pl. \**kēs-més*: Skr. 2<sup>nd</sup> pl. *śas-ta* (Avest. 2<sup>nd</sup> pl. *sas-tā* with the nasal of the sing.), O.C.Sl. 3<sup>rd</sup> sing. *setŭ* i. e. \**se* = \**kēns-t* + an additional -*tŭ*, like *pri-jetŭ* instead of *pri-jē* etc. (§§ 512, 830). Albanian gives us *ḡom* 'I say', for \**kēns-mi* according to G. Meyer (M. Herz z. 70. Geburtst. 1888, p. 86; Etym. Wtb. der alb. Spr., 91; Alb. Stud. III 13, 63).

\**uēid-mi* 'I see, know' 1<sup>st</sup> pl. \**uid-més*: Skr. *vēd-mi* 1<sup>st</sup> pl. *vid-más*, Lith. *veizdmi* instead of regular \**vei(d)-mi* (I § 547 Rem. 1 p. 401). Conjunctive: Skr. 3<sup>rd</sup> sing. *vēd-a-ti* Gr. Hom. 1<sup>st</sup> pl. *εἶδ-ο-μεν* (cp. indic. Skr. *vēd-a-tē* Gr. *εἶδ-ε-ται*). Optative: Skr. *vid-yā-m*, Goth. 1<sup>st</sup> pl. *vit-ei-ma*. Imperative: Skr. *viddhī* Gr. *ἴσθι*, cp. Lith. *veizdi veizd* (I loc. cit., IV § 962). Also perf. 3<sup>rd</sup> sing. \**uóid-e* 'knows', with which the above named mood-forms were associated (cp. II § 136 Rem. 1 p. 438, IV §§ 846, 912, 939, 959). — With thematic vowel: indic. \**uid-ó-*, Skr. *vid-á-ti* Armen. *e-git* Gr. *ἴδ-ε εἰδ-ε εἰδ-ε*.

\**és-mi* 'I am' 1<sup>st</sup> pl. \**s-més*: Skr. *ás-mi s-más*, Armen. *em* (I § 561 p. 417), Gr. *εἰμι* Lesb. *ἔμμι* (G. Meyer, in the work just cited, pp. 81 ff., Etym. Wtb. der alb. Spr. 160, Alb. Stud. III 63, 85), Lat. *es-t* Umbr. 3<sup>rd</sup> pl. *s-ent*, O.Ir. 3<sup>rd</sup> sing. *is* (I § 66 p. 55), Goth. *im* (I § 582 Rem. 2 p. 437) 3<sup>rd</sup> sing. *is-t*, Lith. *es-mi* 3<sup>rd</sup> sing. *ēs-ti ēs-t* O.C.Sl. *jes-mŭ* 3<sup>rd</sup> sing. *jes-tŭ*; on the 2<sup>nd</sup> sing. Skr. *ási* Gr. *εἶ* see § 984. 1. Pret. Skr. *ás-am* 3<sup>rd</sup> sing. *ás* 1<sup>st</sup> pl. *ás-ma* Gr. *ἦ-α ἦ* 3<sup>rd</sup> sing. *ἦ-ς* 1<sup>st</sup> pl. *ἦμεν* O.C.Sl. 2<sup>nd</sup> pl. *-jas-te* see § 480 p. 28, § 481

1) A different explanation of these Sanskrit forms may be found in Bartholomae's Ar. Forsch. II 73 f.

pp. 29 f.; Alban. 3<sup>rd</sup> sing. *iš* for \**es-t* (G. Meyer, in the first work cited above, p. 91). Conjunctive: 3<sup>rd</sup> sing. Skr. *ās-a-ti* *ās-a-t* Lat. (fut.) *er-i-t* (cp. indic. Hom. *ē-o-v* opt. *ē-o-i*, also *ἐόντων ἐών*, Lith. *es-ù* = *esmì* 1<sup>st</sup> pl. *ēs-a-me* partic. *ēs-ās*, O.C.Sl. pret. *-jach-ŭ -jaš-e* § 480 p. 28). Optative: Skr. *s-yā-m s-iyā-m*, Lat. 2<sup>nd</sup> sing. *s-iē-s* 1<sup>st</sup> pl. *s-ī-mus*, O.H.G. 1<sup>st</sup> pl. *s-ī-m*. — With thematic vowel: partic. Gr. *ὄντ*- instead of *όντ*- \**s-o-nt-* (on the analogy of *εἰμὶ* etc. which begin with a smooth breathing) Lat. *s-o-n-t-* 'he who is the doer, guilty' O.Icel. *sannr* 'true, really guilty' (pr. Germ. \**s-a-nþ-a-*) Lith. *sās sanczio* O.C.Sl. *sy sqšta*, indic. Lat. *s-u-m s-u-mus s-u-nt* O.C.Sl. 3<sup>rd</sup> pl. *s-qtŭ*.

\**dhégh-mi* 'I burn': Skr. 2<sup>nd</sup> sing. *dhák-ṣi* Lith. *deg-mì*. The conjunctive implied by these forms is hidden in the indic. Skr. *dáh-a-ti* Lith. *deg-ù*. The weak form \**d(h)gh-* cannot be found; we have evidence for it in Avest. 3<sup>rd</sup> pl. imper. *sc-antī* beside 1<sup>st</sup> sing. indic. *hax-mī* (pr. Ar. \**sak-mi*) from  $\sqrt{\text{seq-}}$  'sequi', Skr. 3<sup>rd</sup> pl. *á-kṣ-an* 3<sup>rd</sup> sing. mid. *gdha* i. e. \**ghs* + *ta* (I § 591 p. 449) beside 3<sup>rd</sup> sing. *á-ghas* from *ghas-* 'eat'.

\**dhé-t* \**é-dhē-t* 'he placed' 2<sup>nd</sup> pl. \**dha-té*: Skr. *dhát-á-dha-t* 3<sup>rd</sup> sing. mid. *á-dhi-ta* 2<sup>nd</sup> sing. imper. *dhi-ṣvá*, Armen. 1<sup>st</sup> sing. *e-di* 3<sup>rd</sup> sing. *e-d*, Gr. 2<sup>nd</sup> pl. *ἐ-θε-τε* 3<sup>rd</sup> sing. mid. *ε-θε-ρο* (*θε-* instead of \**θα-*, I § 109 c pp. 101 f., the Author Gr. Gr.<sup>2</sup> pp. 27 f.), Lat. *con-di-mus* (I § 370 p. 282). Optative: Avest. *d-yā-þ*. Imperative: Lith. *dė-k*. — With thematic vowel Skr. *práti dh-a-t*, *a-dh-a-t*,<sup>1)</sup> Lat. 1<sup>st</sup> sing. *con-d-ō* 3<sup>rd</sup> pl. *-d-u-nt*, Avest. opt. 2<sup>nd</sup> sing. *d-ōi-š*.

\**dō-t* \**é-dō-t* 'he gave' 2<sup>nd</sup> pl. \**dō-té*: Skr. *á-da-t* 3<sup>rd</sup> sing. mid. *á-di-ta*, Armen. 1<sup>st</sup> sing. *e-tu* 3<sup>rd</sup> sing. *e-t*, 1<sup>st</sup> pl. pres. *ta-mk*, Gr. 2<sup>nd</sup> pl. *ἐ-δο-τε* 3<sup>rd</sup> sing. mid. *ἐ-δο-ρο* (*δο-* instead of *δα-*, cp. on *θε-*, above),<sup>2)</sup> Lat. *da-mus red-dimus*. Optative:

1) Less probably, some scholars take *(a-)dhat* to be \**dhatt* = \**dha-* *-dh* + *t*, i. e. formed from the weak present stem \**dha-dh-* (cp. *a-dha-t-tam*).

2) Pauli (Altital. Forsch. III 258) compares Venetian *zoto* 'dedit' with Gr. *δορο*. Admitting that the explanation is in the main correct



Avest. *d-yā-p*. Imperative: Lat. *ce-do*, Lith. *dā-k*. — With thematic vowel: Skr. *dda-t* i. e. *a* + *a-d-a-t*, Lat. *red-d-u-nt*, Avest. opt. 2<sup>nd</sup> sing. *d-ōi-š*.<sup>1)</sup>

\**stā-t* \**ē-stā-t* 'he placed himself', 2<sup>nd</sup> pl. \**stā-té*: Skr. *á-sthā-t*, 3<sup>rd</sup> sing. mid. *á-sthi-ta*, Gr. *ἐ-σθη*, mid. 3<sup>rd</sup> sing. *ἐνι-σθα-ται*<sup>2)</sup>, 2<sup>nd</sup> sing. *ἐ-σθά-θης* = Skr. *á-sthi-thas* (§ 503). Imperative: Lith. *stó-k*. — With thematic vowel: Skr. *asth-a-t*, Avest. *a-xšt-a-p* mid. *xšt-a-ta* (*xšt-* instead of *št-*, see Bartholomae Handb. § 100 Anm. 3 p. 43, and *št-* instead of *st-* following compounds like *paiti-štā*).

§ 494. As the examples in § 493 shew, roots of the *e*-series took regularly the *e*-grade (1<sup>st</sup> strong grade) in strong forms. But probably in the parent language there were forms with the 3<sup>rd</sup> strong grade, or *ē*-grade, also in use.

First we notice Lat. *ēs-t* Lith. *ės-t* O.C.Sl. *jas-tū* from *✓ed-* 'eat', on which see § 480 Rem. p. 27; the normal form was Skr. *ád-mi át-ti* (§ 498). Skr. *ds-tē* Gr. *ἵσ-ται* 'sits' 3<sup>rd</sup> pl. *ds-atē* *ἥ-ται* are usually connected with \**es-ti* 'is'. The rough breathing in Greek must then be explained as due to the analogy of the root *ἐδ-* = \**sed-* 'sedere' (I § 564 Rem. 3 p. 421<sup>3)</sup>). But some forms of the Greek word may be derived at once from the root *sēd-*, which occurs not only in the perfect Goth. *sēt-um* Lith. *sēd-ēs*, but in the Lith. pres. *sėdmi* 'I sit' 3<sup>rd</sup> sing. *sėst*, side by side with which in the usual fashion we have Skr. 2<sup>nd</sup> sing. *sāt-si*. Skr. imper. mid. *sāk-šva* beside indic. 2<sup>nd</sup> sing. *sāk-ši* from *sah-* 'overpower'. Skr. *taš-ṭi* Avest. injunctive *tāš-t* beside Skr. *tākṣa-ti* 'shapes, forms'. Skr. *daś-ṭi* 'pays homage to' from *✓dek-*, see § 639. Further, the Skr.

(cp. G. Meyer, Berl. Phil. Wochenschrift 1892 col. 312 f., Thurneysen Wochenschr. class. Phil. 1892 col. 290 f.), it is a question whether *zoto* should not be regarded as \**dō-to* (cp. the *s*-aorist *zonaso* 'donavit').

1) Probably to the same class belongs Avest., being *daduyē* 2<sup>nd</sup> pl. indic. pres. mid. See Bartholomae, Idg. Forsch. I 495.

2) Fick's connexion of this verb with Skr. partic. *cit-tā-s* is worthless (Fick, Gött. gel. Anz. 1881 p. 1426, Wtb.<sup>4</sup> I 20 f.).

3) In the English translation of this note, 'Spiritus Asper' is a clerical error for 'Spiritus Lenis'.

present forms with *āu* instead of *ō*, as *stāú-ti* 'praises' (3<sup>rd</sup> pl. *stuv-ánti* mid. *stu-tē*, beside which are found 2<sup>nd</sup> sing. *stō-ṣi* conj. *stāv-a-t*) and *snāu-ti* 'drips' (cp. Gr. *ρέω ρεύσομαι*), also *mārṣ-ṭi* 'wipes' (3<sup>rd</sup> pl. *mṛj-ánti*).<sup>1</sup>)

Along with these non-thematic *ē*-forms stand usually others with the thematic vowel; thus, Lith. *ėd-u* beside *ėd-mi*, *sėd-u* beside *sėd-mi*, Skr. *as-a-tē* beside *ās-tē*, *dāś-a-ti* beside *dāṣ-ṭi*, *sāh-a-ti* beside *sāh-ṣva*, *mārj-a-ti* beside *mārṣ-ṭi*. Compare Gr. *μύδουαι* etc., § 514.

§ 495. In all languages, as we shall see, it is common for the strong stem to spread into what should be weak-stem forms, but the reverse is rare.

We should especially mention here that the strong-grade *ā*, *ē*, and *ō* spread from roots ending in them to the weak persons which properly had *ə*. This re-formation brought about some confusion with Class X, where there is no gradation.

Skr. 1<sup>st</sup> pl. *á-sthā-ma* Gr. *ἑστημεν* instead of \**a-sthi-ma* \**ἑσταμεν* (cp. § 493 pp. 53 f.). The difference between *ἑστημεν* and *ἑσταμεν* *ἑδομεν* was due to the intransitive meaning of *ἑστην*, and to the powerful attraction of a word closely connected in meaning — *ἑβην ἑβημεν* (Skr. *ágam ágama*); cp. the Author, Kuhn's Zeitschr. xxv 220, Osthoff's Perfect 373 f., and below, § 497 Rem. As regards Lat. *stā-mus* beside *dā-mus*, see §§ 505, 584 Rem.

In Sanskrit we find also *á-dhā-ma á-dā-ma* instead of \**a-dhi-ma* \**a-di-ma* (cp. § 493 p. 53), and similarly *ā* instead of *i* in the plural and dual active of all roots ending in (Aryan) *-ā*. Compare opt. 1<sup>st</sup> pl. *s-yā-ma*, instead of \**s-ī-ma*, following *s-yā-m*, § 940.

Unlike Gr. *φημι* 'I say': *φωμεν*, which undoubtedly has original gradation (cp. O.H.G. *bannu* = \**bha-njō*, Gr. *φαίρω* \**bha-njō*, see §§ 611, 654), all recorded forms of Skr. *bhā-ti* 'shines' follow Class X, as pl. *bhā-nti* imper. *bha-hi* partic.

1) The ablaut of *stāú-ti* and *mārṣ-ṭi* is exactly parallel to that of the *s*-Aorist. See § 811.

*bhā-ta-s* etc. We must therefore assume for this Skr. verb a stem *bh-a-*, i. e. an extension of the root by the ungraduated suffix *-a-* (*bhā-ti* : *bhā* f. = *psā-ti* : *psā* f.), which is also possible for Lat. *fa-tur* *for* and O.C.Sl. *ba-jā* 'fabulor' (§ 706).<sup>1)</sup>

§ 496. The strong stem is remarkable in Skr. *śē-tē* Avest. *saē-tē* Gr. *κεῖ-ται* 'lies' (cp. Skr. perf. *śi-śy-ē*, *-śi-ś* 'lying') beside Skr. *śāy-a-tē* Gr. Hom. *κέ-ο-νται* opt. *κέ-ο-ι-το*. Very uncertain explanations are suggested in vol. I § 598 p. 453, and by Meringer in the *Zeitschr. öst. Gymn.* 1888, p. 134. Perhaps the irregularity was due to a very early change from thematic to non-thematic conjugation, which was suggested by *ds-tē* *ἦσ-ται* 'sits'. I believe that this same change must be assumed for *γέν-το* *ἔ-γεν-το* (Hesiod and other poets) beside *γένε-το* *ἔ-γένε-το* (cp. 3<sup>rd</sup> dual *γεγά-την*), and for *σεῦ-ται* (only in Soph. Tr. 645) beside *σεύ-ε-ται* (cp. *σύ-το*).<sup>2)</sup> It is beyond all doubt seen in *ἄμυιπ-το* = *ἀμυίβ-το* in Nonnus, and other such forms in late Greek poetry (Rzach, *Gram. Stud. zu Apoll. Rhod.*, 164), and in some Lithuanian presents in *-mi* (§ 511).

Remark. *\*ues-tai* 'clothes himself' (Skr. *vas-tē* Gr. *ἡπλ-εσται* *ἔσ-το*) is not of this class, as it must be analysed *\*ue-es-tai* (§ 656).

§ 497. Like *ī-mahē* (Gr. *ἴ-ο-μεν* § 493 pp. 51 f., § 914), many other forms show the weak-grade with bye-accent. Thus Skr. *á-bhū-ma* Gr. *ἔ-φθ-μεν* Umbr. *fū-tu* 'esto' Lith. *bú-k* 'be it' from  $\sqrt{bhe}$ - 'become, be'; compare the sing. with the same grade of root Skr. *á-bhū-t* Gr. *ἔ-φθ* (cp. perf. Skr. 2<sup>nd</sup> sing. *ba-bhū-tha*), without question somewhat influenced by preterites of Class X (§§ 597 ff.) such as Skr. *á-dr-ā-t* *á-dr-ā-ma* *á-gl-ā-t* *á-gl-ā-ma* Gr. *ἔ-δρ-α* *ἔ-δρ-α-μεν* *ἔ-βλ-η* *ἔ-βλ-η-μεν*.

1)  $\sqrt{bhā}$ - means 'to show, send forth, make known'. If we connect with it Skr. *bhānati* 'sounds, calls out' (Osthoff, *Perf.* 353, Whitney, *Skr. Roots* 109 f.), this must be taken as an extension *\*bh-eno-* or *\*bh-ṇno-* (§ 619). With the same extension Moulton connects Lat. *fenestra* (*Proceed. Camb. Phil. Soc.* 1890, May 22, p. 9).

2) The 3<sup>rd</sup> pl. mid. Ved. *á-jan-ata* beside *á-jan-a-nta* may be similarly taken. It is true that the word may quite well be derived from *\*e-gṇ-ato* (cp. *á-jñ-atu*).

Also from  $\sqrt{er-}$  'set in motion' ( $\epsilon\rho\epsilon\tau\omicron \cdot \acute{\omega}\rho\mu\acute{\eta}\theta\eta$ ,  $\epsilon\rho\sigma\eta \cdot \acute{\omicron}\rho\mu\acute{\eta}\sigma\eta$  Hesych., Skr. *ár-ti* aor. mid. *ár-ta*) we have an Idg. mid.  $*\sqrt{t}ai$ : Skr. *ír-tē* imper. *ír-šva* Avest. *ar°-šva* partic. Skr. *ír-ṇá-s*, Gr.  $\acute{\omicron}\rho\text{-}\sigma\omicron$  partic.  $\acute{\omicron}\rho\text{-}\mu\epsilon\nu\omicron\text{-}\varsigma$  inf.  $\acute{\omicron}\rho\text{-}\theta\alpha\iota$  (I § 306 pp. 241 f.). The Skr. *ír-* Gr.  $\acute{\omicron}\rho\text{-}$  were used before sonants too, instead of  $*ir\text{-}\acute{\alpha}\rho\text{-}$  (for  $*\sqrt{r-}$ ), which gives us such forms as Skr. 3<sup>rd</sup> pl. *ír-atē* (cp. Skr. *á-bhūv-am* instead of *á-bhuv-am* following *á-bhū-š* etc.) 3<sup>rd</sup> sing. *ír-a-tē*, Gr.  $\acute{\omicron}\rho\text{-}\omicron\text{-}\iota\text{-}\tau\omicron$   $\acute{\omicron}\rho\text{-}\eta\text{-}\tau\alpha\iota$ ; another re-formation is the augment in  $\acute{\omega}\rho\tau\omicron$  ( $*\acute{\omicron}\rho\tau\omicron$  orig. without augment =  $*\sqrt{t}\acute{\omicron}$ ). A Germanic form of this kind is A.S. *ear-ā* 'thou art', see § 509. In the same relation as  $\acute{\omicron}\rho\text{-}\omicron\text{-}\iota\text{-}\tau\omicron$  bears to  $\acute{\omicron}\rho\text{-}\sigma\omicron$ ,  $\acute{\iota}\text{-}\mu\omicron\lambda\text{-}\omicron\text{-}\nu$  stands to  $\acute{\iota}\text{-}\beta\lambda\omega \cdot \epsilon\tau\acute{\alpha}\nu\eta$ ,  $\acute{\iota}\chi\epsilon\tau\omicron$ ,  $\epsilon\sigma\tau\eta$  Hesych., since  $\beta\lambda\omega\text{-}$  represents an Idg.  $*m\sqrt{f-}$  (cp. I § 306 p. 243).

On de Saussure's hypothesis, *bhū-* was the weak grade of *bheya-* (Skr. fut. *bhavi-šyá-ti* etc.), and  $\sqrt{f-}$  the weak grade of *er-* (Skr. fut. *ari-šyá-ti* etc.), and so on.

Remark. To this list of forms I have hitherto added Skr. *á-gā-ma* Gr.  $\acute{\iota}\text{-}\beta\eta\text{-}\mu\epsilon\nu$ , 3<sup>rd</sup> sing. *á-gā-t*  $\acute{\iota}\text{-}\beta\eta$  (cp. *á-bhū-t*  $\acute{\iota}\text{-}\varphi\upsilon$ ), equating *gā-βη* =  $*g\sqrt{h}$ - (I § 253 p. 206). But another hypothesis appears to be preferable from Skr. *ji-gā-ti* Gr. Hom.  $\beta\iota\text{-}\beta\acute{\alpha}\iota$ ; Skr. *vi-gā-man-* n. 'step' Gr.  $\beta\eta\text{-}\mu\alpha$ , Skr. perf. mid. *ja-gē*, and others of the like nature. This is, that there were original variants  $*gā\text{-}$  and  $*gem\text{-}$ , like  $*drā\text{-}$  and  $*drem\text{-}$  'run' (§ 488 p. 47, § 579). It would be easy to decide this point, if only  $*gā\text{-}$  could be found outside of Aryan and Greek. The derivation of Lett. *gāju* 'I went' is doubtful (see Wiedemann, *Das lit. Praet.*, 141 f.), and it is worse than unsafe to adduce O.H.G. *pfad* 'path' (Fick, *Wtb.* I<sup>4</sup> 33).

§ 498. Aryan.  $\sqrt{qer-}$  'make': Skr. 2<sup>nd</sup> sing. *kár-ši* 2<sup>nd</sup> 3<sup>rd</sup> sing. *á-kar* 2<sup>nd</sup> pl. *kṛ-thá* 3<sup>rd</sup> pl. *á-kr-an* 3<sup>rd</sup> sing. mid. *á-kṛ-ta*, Avest. 3<sup>rd</sup> sing. *cor°p* = pr. Ar.  $*car\text{-}t$  (I § 94 p. 89, § 647. 7 pp. 493 f.); on O.Pers. 1<sup>st</sup> pl. *a-kū-mā* 3<sup>rd</sup> sing. *a-kū-ta* see Bartholomae, *Ar. Forsch.* II 67 f. Imperative: Skr. *kṛ-dhí*, mid. *kṛ-švā* Avest. *ker°-švā*. Conjunctive: Skr. *kár-a-ti* Avest. 1<sup>st</sup> sing. *carānti* (cp. indic. Skr. *kar-a-ti á-kar-a-t*, imper. 2<sup>nd</sup> sing. O.Pers. *pari-karā*). Optative: Skr. 1<sup>st</sup> pl. *kr-iyā-ma*. Skr. *kar-* always instead of regular *car-* (kept in Avestic) from the weak stem, but *á-kar-ma kár-ta* have *-ar-* on the analogy of the strong. On the difficult forms Skr. *kur-más kur-vás* (whence sing. *kur-mi*) opt. *kur-yā-m* etc., see I § 289 p. 231,

§ 290 Rem. p. 232, Hübschmann, Kuhn's Zeitschr. xxvii 112, von Fierlinger *ibid.* 438, Bartholomae Ar. Forsch. ii 67 f., 86 ff., J. Wackernagel in E. Kuhn's Litteraturbl. iii 55 f., and below in this volume, § 641.

✓*der-* 'split, burst': Skr. 2<sup>nd</sup> sing. *dár-ši* 3<sup>rd</sup> sing. *á-dar*; opt. *dīr-yā-t* = \**dīr-iē-t* (cp. pass. *dīr-yá-tē* partic. *dīr-ná-s*).

✓*ghen-* 'strike, slay': 3<sup>rd</sup> sing. Skr. *hán-ti* Avest. *jainti*, Skr. 2<sup>nd</sup> pl. *ha-thá* 3<sup>rd</sup> pl. *ghn-ánti*, mid. 1<sup>st</sup> sing. Avest. *yn-ē* 3<sup>rd</sup> sing. Skr. *ha-tē* 3<sup>rd</sup> pl. Skr. *ghn-atē*; pret. 1<sup>st</sup> sing. Skr. *á-han-am* O.Pers. *a-jan-am* 2<sup>nd</sup> sing. Skr. *á-han* Avest. *a-jēn* (Bartholomae, Bezz. Beitr. xiii 64 f.) 3<sup>rd</sup> sing. Skr. *á-han* O.Pers. *a-ja* i. e. *a-jan* 2<sup>nd</sup> pl. Skr. *á-ha-ta* O.Pers. *ja-tā*; imperative Skr. *ja-hí* for \**jha-dhi* (I § 480 p. 355) Avest. *jaidī*. The weak form Ar. \**jha-* (Skr. *ha- ja-* Iran. *ja-*) instead of regular \**gha-* = \**ghy-* on the analogy of \**jhan-* = \**ghen-*, I §§ 453 f. pp. 335 f. Skr. 1<sup>st</sup> dual *hanvas* instead of \**ghanvas* = \**ghy-ues* (I § 225 p. 193, § 229 p. 195). -*n-* passes by analogy into other weak persons: Skr. 1<sup>st</sup> pl. *han-mas* imper. *han-dhí* (contrast *jahí*). Conjunctive: Skr. *hán-a-ti* Avest. *janaiti* (cp. indic. Skr. *han-a-ti a-han-a-t* Avest. *janaiti* Gr. *ἐ-στειν-ν*). Optative: Skr. *han-yā-t* Avest. *janyāp* O.Pers. *janiyā*, pr. Ar. \**jhan-īa-t* instead of regular \**ghaniāt* for \**ghy-iē-t* (I § 454 Rem. pp. 335 f.); also found, with regular form, mid. Skr. *ghn-īya ghn-ī-ta*, and, on the analogy of the active, *han-ī-ta*. — With thematic vowel: Skr. 2<sup>nd</sup> pl. *ghn-a-ta a-ghn-a-n a-ghn-u-nta* partic. *ghn-a-māna-s* (Avest. conj. 3<sup>rd</sup> pl. *yn-a-p*).

Pr. Ar. \**jan-ti* Idg. \**gem-ti*, see § 493 p. 51. Imperative: Skr. *ga-dhí ga-hí* Avest. *gauidī*. 3<sup>rd</sup> pl. Skr. *á-gm-an gm-án* Avest. *g'm-en*. Skr. 1<sup>st</sup> dual *gánvahi* regular for \**gm-u-* (I § 225 p. 193, § 229 p. 195), only with changed accent. -*n-* (for -*m-*) passing by analogy into other weak persons: Skr. 1<sup>st</sup> pl. *á-gan-ma* 2<sup>nd</sup> pl. *gan-tá gán-ta* beside *ga-tá*, *g-* instead of *j-* in Skr. *á-gan gán-tu* (Avest. *jantū*), *j-* instead of *g-* in opt. 3<sup>rd</sup> sing. Avest. *jam-yā-p* O.Pers. *jam-īyā* (Skr. *gam-yā-t*), see I § 451 p. 334.

Pr. Ar. \**ai-ti*, Idg. \**ei-ti*, see § 493 p. 51. 3<sup>rd</sup> sing. Skr. *é-ti* Avest. *aē-iti* O.Pers. *ai-tiy*, 3<sup>rd</sup> pl. Skr. *y-ānti* Avest. *y-ēinti*, imper. Skr. *i-hi* Avest. *i-dī i-āi* O.Pers. *i-diy*. By re-formation: Skr. 1<sup>st</sup> sing. *i-mi* instead of *é-mi*. Preterite 1<sup>st</sup> sing. Skr. *āy-am* O.Pers. *ayam* i. e. *ay-am*, 3<sup>rd</sup> sing. Skr. *āi-t* Avest. *ai-p* 3<sup>rd</sup> dual. Skr. *āi-tām* Avest. *ai-tem*. Conjunctive: Skr. *áy-a-ti* *á-ya-t* Avest. *ay-a-p* (cp. indic. Skr. *áy-a-tē*, Avest. imper. *ay-a* conj. *ay-ā-p* opt. *ay-ōi-p*).

Skr. *kṣé-ti* Avest. *šaē-iti* 'lingers, dwells', 3<sup>rd</sup> dual Skr. *kṣi-tās* 3<sup>rd</sup> pl. Skr. *kṣiy-ānti*, conj. Skr. *kṣáy-a-t*: Gr. Hom. *iv-xti-μενος* 'well built'. — With thematic vowel Skr. *kṣiy-ā-ti*.

✓ *kleṣ-* 'hear': Skr. 2<sup>nd</sup> sing. *śrō-ṣi*, 1<sup>st</sup> sing. *á-śrav-am* 3<sup>rd</sup> sing. *á-śrō-t*, 2<sup>nd</sup> pl. *śru-ta* and following the singular *śrō-ta* Avest. *srāo-ta*, Avest. 2<sup>nd</sup> pl. mid. *a-srū-dūm*, Skr. imper. *śru-dhī*; conj. Skr. 3<sup>rd</sup> dual *śrāv-a-tas*, opt. Avest. 1<sup>st</sup> pl. *srovīmā* i. e. *sruv-i-mā*: Gr. imper. *κλύ-θι κλύ-τε* (cp. § 497 pp. 56 f.) *Περί-κλύ-μενος*. — With thematic vowel Skr. *śruv-a-m* Gr. *κλύω* (cp. § 527).

✓ *derk-* 'see': Skr. *á-darś-am* Avest. *dars-em*, 1<sup>st</sup> pl. Skr. *á-dṛś-ma*, and also *á-darś-ma* following the singular; conj. Skr. *dārś-a-t* Avest. 1<sup>st</sup> pl. *dar's-a-ma* (cp. indic. Skr. *á-darś-a-t*). — With thematic vowel Skr. 3<sup>rd</sup> pl. *á-dṛś-a-n* opt. *dṛś-é-t*.

Skr. *á-grabh-am* Avest. *grab-em* 'I grasped', 3<sup>rd</sup> pl. Skr. *á-grbh-ran*.

Skr. *chand-* 'appear': 3<sup>rd</sup> sing. *chánt-ti*.

✓ *bheṣd-* 'findere': Skr. 1<sup>st</sup> sing. *á-bhēd-am* 3<sup>rd</sup> sing. *á-bhēt*; — with thematic vowel opt. *bhid-ē-t*. Avest. *miṣ-* (Skr. *mith-*) 'destroy': 3<sup>rd</sup> sing. *mōist*, conj. *mōiṣ-a-p* (cp. indic. Skr. *mēth-a-ti*), opt. *miṣ-yā-p*.

✓ *dheugh-* 'milk, give milk' (cp. Fick Wtb. I<sup>4</sup> 73): Skr. 3<sup>rd</sup> sing. *dōgdhi* 3<sup>rd</sup> pl. *duh-ānti*, mid. 3<sup>rd</sup> sing. *dugdhē* 3<sup>rd</sup> pl. *duh-atē -ātē* conj. *dōh-a-tē*, opt. *duh-i-ta*; — with thematic vowel *á-duh-a-t* opt. *duh-ē-t*. ✓ *jeug-* 'iungere': Skr. 3<sup>rd</sup> sing. mid. *á-yuk-ta* 1<sup>st</sup> pl. *á-yuj-mahi*, Avest. 3<sup>rd</sup> pl. *yāj-ēn* 1<sup>st</sup> pl. mid. *yaoy-maidē* with non-original strong stem; — with thematic vowel, Skr. *á-yuj-a-t*.

✓*uek-* 'wish, desire': Skr. 1<sup>st</sup> sing. *váš-mi* 3<sup>rd</sup> sing. *váš-ṭi* 1<sup>st</sup> pl. *uś-mási*, Avest. *vasmī vašti usmahī*, conj. Skr. *váš-a-t* Avest. *vasaḥ* (cp. indic. Skr. *váš-a-ti* imper. *váš-a*). — With thematic vowel Skr. *uś-á-māna-s*.

Pr. Ar. *\*as-ti*, Idg. *\*es-ti*, see § 493 p. 52. Skr. sing. *ás-mi ási ds-ti* pl. *s-más s-thá s-ánti*, Avest. sing. *ahmi ahi asti* pl. *mahi* (I § 558.3 p. 414) *sta henti*, O.Pers. sing. *amīy* (I § 558.3 p. 415) *ahy astiy* 3<sup>rd</sup> pl. *hatiy* i. e. *hantiy*; O.Pers. 1<sup>st</sup> pl. *amahy* with *a-* from the singular. Pret. Skr. 1<sup>st</sup> sing. *ás-am* 3<sup>rd</sup> sing. *ás* O.Pers. 1<sup>st</sup> sing. *aham* i. e. *āham* Avest. 3<sup>rd</sup> sing. *as* (I § 647.7 pp. 493 f., § 649.6 p. 496), pl. Skr. *ds-ma ds-ta ds-an* O.Pers. 3<sup>rd</sup> pl. *aha* i. e. *āha*, cp. § 481 pp. 29 f., also unaugmented Avest. 3<sup>rd</sup> sing. *as* 3<sup>rd</sup> pl. *h-en* Skr. *s-án*; on the 2<sup>nd</sup> and 3<sup>rd</sup> sing. Skr. *ás-ī-ṣ* *ás-ī-t*, see § 574. Imperative: Avest. *z-dī*; Skr. *ēdhī* for *\*az-dhi* (I § 591 p. 447) instead of regular *\*dhi* following the analogy of forms with strong root. Conjunctive: Skr. *ás-a-ti ás-a-t* Avest. *aṛh-a-itī aṛh-a-ḥ* O.Pers. *ah-a-tiy*. Optative: Skr. *s-yád-t s-iyád-t* Avest. *h-yā-ḥ*.

✓*ed-* 'eat': Skr. *ád-mi át-ti*. So in all the weak persons *ad-*, as 3<sup>rd</sup> pl. *ad-anti* 2<sup>nd</sup> pl. *at-tá* imper. *ad-dhī*, obviously because such forms as *\*ta \*dhi* were not clear enough (cp. above, Skr. *ēdhī*). Conjunctive: *\*ad-a-ti \*ad-a-t* (cp. 2<sup>nd</sup> sing. mid. *ad-a-sva* Gr. *ēd-ω* Lat. *ed-ō* Goth. *it-a*). On the relation between *ád-mi* and Lat. *ēst* Lith. *ėst*, see § 480 Rem. pp. 28 f., § 494 pp. 54 f.

Skr. *dhákṣi* and others of the same sort, see § 493 p. 53. Skr. *bhi-ṣak-ti* 'heals' (*bhi-* is a bye-form of *abhi*) was no longer recognised for a compound, hence 3<sup>rd</sup> sing. *a-bhiṣṇak* R.-V. x, 131.5, following Class XV, and *bhēṣajā-s* 'healing'.

✓*dhē-* *dō-*, Skr. *dhā- dā-* Iran. *dā-* (in Iranian the two stems ran into one, and it is no longer possible to distinguish their meaning exactly), see § 493 p. 53. Skr. *á-dha-t dhá-t á-dā-t* pl. *á-dhā-ma á-dā-ma*, Avest. *dā-ḥ dā-mā* O.Pers. *a-dā*; on *ā* in the plural, see § 495 p. 55; mid. Skr. *á-dhi-ta á-di-ta*,

imper. *dhi-ṣvā*. Conjunctive: Skr. *dhā-ti* pl. mid. *dhā-mahē* Avest. *dā-itī* mid *dā-itē* (§ 933). Optative: Avest. *d-yā-p*.

✓*stā*-, see § 493 p. 55. Skr. *ā-sthā-t ā-sthā-ma* (like *ā-dhā-ma*, see above), Avest. *paiti-štā-p*; mid. Skr. *ā-sthi-ta*. Conjunctive: Skr. *sthā-ti* 2<sup>nd</sup> dual *sthā-thas*, Avest. mid. *xštā-itē* (§ 933).

✓*dā*- 'separate, divide up' (Gr. *ḃā-μo-ς ḃḡ-μo-ς*): Skr. *dā-ti* 3<sup>rd</sup> pl. *dā-nti* (like *ā-dhā-ma*, above), mid. 1<sup>st</sup> pl. *ā-di-mahi* (cp. partic. *di-nā-s di-ta-s* Gr. *ḃα-τῆo-μαι*).

Sometimes in place of *-i* = Idg. *-ə* in roots of the latter kind, Sanskrit has *-ī*: *ā-dhī-mahi* from ✓*dhē*-, *mī-mahē* from ✓*mē*- 'measure' (3<sup>rd</sup> sing. *mā-ti*), *dī-ṣva* from ✓*dō*-, *ā-dī-mahi* from ✓*dā*-. This *ī* was connected with a very wide-spread Sanskrit re-formation.

There was a certain element used in root-extension, found in the parent language, and appearing in Sanskrit under the forms of *-ī*- and *-i*-. Whether it be dubbed *Root-Determinative* or *Suffix*, matters nothing (see § 488 pp. 44 ff.). Examples of its use are *pī*- 'swell, give to drink' from ✓*pō*- (*pi-pī-tē pī-yā-tē pī-lā-s pī-pi-hī pi-nva-ti*), *rī*- 'run, flow' from ✓*er* (*rī-ya-tē rī-tī-ṣ rī-nd-ti rī-t-*), *śrī*- 'boils' beside *śr-tā-s*. Another form of this determinative in Sanskrit, as Bartholomae has pointed out (Stud. zur idg. Spr., II 63 ff.), is *āi*, seen in the Vedic preterites *ā-śar-āi-t* 'he broke up' beside *a-śar-i-t śār-ī-tōṣ*, and *āj-āi-ṣ* 'thou dravest' (unaugmented); and this word is closely connected with Gr. *ἀγ-ίνω ἀγ-ινέω* (cp. § 801).<sup>1)</sup> We shall meet the grade *-ī*- in several other categories of Sanskrit forms.

Now this *-ī*-, originally only a variant of Ar. *-i*- = Idg. *-i*-, encroached upon Ar. *-i*- = Idg. *-ə*-, so that in Aryan

1) It is probable that another strong grade of the same determinative is contained in the Idg. present in *-éiō* (as Skr. *śv-āya-ti vart-āya-ti* Lat. *qu-eō mon-eō*), to which belonged a participle in *-i-to-s* and *-i-to-s* (Class XXXII). And I would now (with Bezzenger, Zur Gesch. der lit. Spr., 195) recognise a form exactly answering to Skr. *ājāi-ṣ* in Gr. *ἄγμ-*; *ἄγμ* (for *\*-ēi-s \*-ēi-t*); see § 987. 1, and § 995. 2.



*ī* as well as *i* was found in the same ablaut series with *ā*.<sup>1)</sup> Hence arose the above named forms *ādhimahi* instead of *ādhimahi* beside *ādham* etc., and hence *śi-śi-hi* \**śi-śi-tē* instead of \**śi-śi-hi* \**śi-śi-tē* (cp. *śi-tā-s*) beside *śi-śa-ti* (§ 538), *mṛ-ṇi-mās* instead of \**mṛ-ṇi-mās* (cp. Gr. -*ρα-μεν*) beside *mṛ-ṇā-mi* (§ 597), *á-starī-ṣ* instead of \**a-stariṣ* (§ 839). Last of all, *-ī-* even pushed out *a* = *ə* in the root of forms like pass. \**dha-ya-tē* = Avest. *da-yē-tē* (I § 109. *a*. p. 101), and so we have *dhī-yā-tē* (§§ 707, 709).

It is true that there are other instances besides these of variation between Idg. *i* and *ī*; for instance, in the syllable of reduplication, §§ 467, 469, 473. Whether these had anything to do with associating *ī* with *i* = *ə*, and if so, how far, I leave an open question.

§ 499. A few more examples may here be added to those already given of the confusion between weak and strong stem.

Strong Stem instead of Weak. Skr. 2<sup>nd</sup> dual *spar-tam* beside *spr-tam* from *spar-* 'save, win'.<sup>2)</sup> Avest. 3<sup>rd</sup> sing. mid. *man-tā* beside Skr. *á-ma-ta* from *man-* 'think'. Skr. 1<sup>st</sup> pl. *á-hē-ma* (cp. 3<sup>rd</sup> pl. *á-hy-an*) from *hi-* 'impel'. Skr. 2<sup>nd</sup> pl. *stō-ta* (cp. 2<sup>nd</sup> dual *stu-tam*) Avest. 1<sup>st</sup> pl. mid. *stao-maidē* from *stu-* 'praise' (cp. Skr. *stāu-ti* § 494 p. 54). Skr. 2<sup>nd</sup> pl. *vart-ta* (cp. 3<sup>rd</sup> pl. *á-vṛt-ran*) from *vart-* 'vertere'. Avest. 2<sup>nd</sup> pl. *sas-tā* beside Skr. *śas-ta* from *√kēns-* 'foretel' (§ 493 p. 52). Skr. 1<sup>st</sup> pl. *chēd-ma* from *chid-* 'cut'. Skr. 2<sup>nd</sup> pl. mid. *vōdhvam* beside *ūdhvam* 2<sup>nd</sup> dual act. *vōdham* (I § 404. 2 pp. 298 f., § 482 p. 356) compared with 2<sup>nd</sup> sing. *vákṣi*, *√yegh-* 'vehere'. Skr. 3<sup>rd</sup> sing. mid. *á-tak-ta* beside *ták-ti* 'runs, pushes, shoots', *√teq-*, cp. the weak grade *tq-* in Avest. partic. perf. *ta-ḥk-uš-* (I § 473. 2 p. 349).

1) Bartholomae (*loc. cit.*) assumes *ā : ī* to be an orig. ablaut; he believes *ā* came from *āi* in Idg., and e. g. Lat. *erās* (contrasted with Skr. *āsi-ṣ*) is derived by him from \**esāi-s*. I cannot approve this theory.

2) Avestic mid. 3<sup>rd</sup> sing. *var-tā* 1<sup>st</sup> pl. *var'-maidē*, compared with Skr. *á-vṛ-ta*, are not safe examples to cite in proof of this re-formation, because *var'*- may come from \**vṛ-*.

Weak Stem instead of Strong: much rarer. Skr. *i-mi* beside *ē-mi* from *i-* 'go' (already cited, § 498 p. 59). Skr. 3<sup>rd</sup> sing. *á-vṛk* beside *várk* (mid. *á-vṛk-ta*) from *varj-* 'twist' (but *vice versa* 2<sup>nd</sup> dual *vark-tam* instead of *vṛk-tam*). Avest. 2<sup>nd</sup> sing. *a-per's* instead of *\*a-fraš* ground-form *\*e-prek-s* from *√ prek-* 'ask' (*vice versa*, 3<sup>rd</sup> sing. mid. *fraš-tā* instead of *\*per's-tā*).

§ 500. In Aryan, the ever increasing use of thematic forms was helped on by the like endings *-am* in the first person singular, and *-anti -an* in the third plural. Sometimes the desire for clear expression came in too. Thus Skr. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *āda-s āda-t* drove out *\*āt* (both persons) from *√ ed-* 'eat' (1<sup>st</sup> sing. *ād-am* 3<sup>rd</sup> pl. *ād-an*),<sup>1)</sup> and in Avestic *-aitē -ata* (= Skr. *-atē -ata*), endings of the 3<sup>rd</sup> pl. middle, were almost entirely dropped in favour of the thematic endings *-antē -anta*, by which the plural was more clearly marked; e. g. *ānōh-antē* as contrasted with Skr. *ās-atē* 'they sit' (§ 1067. 1).

Much the same may be said of the other non-thematic present classes. Compare particularly the Avest. 3<sup>rd</sup> pl. of Classes III and V, in *-anti -enti* instead of *-aiti* (= Skr. *-ati*), §§ 540, 556, 1018. 1. *b*.

§ 501. Armenian. *e-kn* 'he came': Skr. *á-gan*, common ground-form *\*e-gem-t*, see § 493 p. 51; the 1<sup>st</sup> sing. *eki* and 3<sup>rd</sup> pl. *ekin* are said to be adformates of *edi edin* (see below); Bugge, Kuhn's Zeitschr. xxxii 75.

*em* 'am': Skr. *ás-mi*, see § 493 p. 52; 2<sup>nd</sup> sing. *es* for *\*es-si* (I § 559 p. 416); 3<sup>rd</sup> sing. *ē* following *berē* 'fert' for *\*bhere-ti* (*vice versa*, 2<sup>nd</sup> sing. *beres* follows *es*); 3<sup>rd</sup> pl. *en* doubtless for Idg. *\*s-enti* (Bugge, Kuhn's Zeitschr. xxxii 71), cp. § 1019.

*e-di* 'I placed': Skr. *á-dhā-m*, see § 493 p. 53; 2<sup>nd</sup> sing. *e-di-r* 3<sup>rd</sup> sing. *e-d* 2<sup>nd</sup> pl. *e-di-ṛ* 3<sup>rd</sup> *e-di-n*. *di-* = Idg. *\*dhē-* (I § 71 p. 62), and thus the strong stem has here passed into

1) Similarly, the forms with an *i*-determinative, *ās-i-š ās-i-t* 'eras erat' establish themselves in place of *ās* (Vedic for both persons); see § 574.

the plural. The same is true of *e-tu* 'I gave': Skr. *á-dā-m*, see § 493 p. 53; 2<sup>nd</sup> sing. *e-tu-r* 3<sup>rd</sup> sing. *e-t* 2<sup>nd</sup> pl. *e-tu-k̃* 3<sup>rd</sup> pl. *e-tu-n*; *tu-* = Idg. *\*dō-* (I § 87 p. 84). But *ta-* = Idg. *\*dā-* is the stem of the present 1<sup>st</sup> pl. *ta-mk̃* 'damus', whence *a* appears instead of *u* in the singular *ta-m* (I § 109. *a*. p. 101).

*gom* 'I am' is compared by Hübschmann (Arm. Stud. I 25, 61) with Gothic *visa* 'I remain, tarry'; and he conjectures that it is derived from *\*ues-mi*; Bugge (as cited, page 7) offers another explanation, but hardly improves upon this.

§ 502. Greek. *κτεν-* 'kill' = Skr. *kṣan-*: 1<sup>st</sup> pl. *ἐκτα-μεν*, 3<sup>rd</sup> sing. *ἀπ-έκτα-το* = Skr. *á-kṣa-ta*, 2<sup>nd</sup> sing. *ἐκτά-θης* = Skr. *á-kṣa-thās* (§ 503). The Homeric 3<sup>rd</sup> pl. *ἐκτάν*, conj. 1<sup>st</sup> pl. *κτέωμεν*, partic. *-κτάς* follow the analogy of roots in *-ā* (*ἐ-φᾶν* etc.), like *γέγα-κα* (Pindar) from *✓γεν-* etc. (the Author, Gr. Gr.<sup>2</sup> p. 47). — With thematic vowel *ἐκταν-ο-ν*.

Remark. The Homeric 1<sup>st</sup> sing. *-εκταν* and 3<sup>rd</sup> sing. *εκτα* are peculiar. *a* is certainly short only in O 432 (*ναι*'), *ἐπεὶ δυνδρα κατέκτε Κυθήρουσι ζαθέοισιν*). Is it possible that the original forms were *ἐκταν εκτα* with Aeolic *a*, which would be re-formates of the same nature as 3<sup>rd</sup> pl. *ἐκτάν*? Or is *εκτα* a re-formate like Skr. *á-vrk* beside *várk* (§ 499 p. 63), and *-εκτάν* due simply to the analogy of *εκτά*?

✓ *bher-* 'ferre': 2<sup>nd</sup> pl. *φερ-τε* instead of *\*φρα-τε* *\*φαρ-τε*: Skr. *bhár-ti* 2<sup>nd</sup> dual *bhṛ-tám*, Lat. *fer-t* (§ 505).

✓ *ger-* 'swallow': *ἐβρω* · *ἐφαγην*, *ἔδακε*, *διέσπασεν*; *βρω* = *\*gř-*, weak grade like *φῶ-* in *ἴ-φῶ*, § 497 p. 56.

*ελ-μι* 'I will go', Idg. *\*éǵ-mi*, see § 493 p. 52, 2<sup>nd</sup> sing. *εἰ* for *\*εἰ-(σ)*, 3<sup>rd</sup> sing. *εἴ-σι*; pl. 1<sup>st</sup> person *ἔ-μεν* 2<sup>nd</sup> *ἔ-τε*; 3<sup>rd</sup> pl. *ἔσσι* either for *\*iǵ-αντι* (Idg. *\*iǵ-énti*) or instead of *\*άντι* (Idg. *\*ǵ-enti*) with *i* prefixt following *ἔ-μεν ἔ-τε*. Pret. 1<sup>st</sup> sing. *ἦα* instead of *\*ἦα* for *\*ḡk-a* (Skr. *áy-am*) following forms with a personal ending beginning in a consonant, such as *ἦ-μεν* (on the augment see § 480 p. 28, § 481 pp. 29 f.); unaugmented 3<sup>rd</sup> dual *ἔ-την*. Imperative *ἔ-θι*: Skr. *i-hí*. The old conj. and opt., answering to Skr. *áy-a-ti* and *i-yá-t*, are not found. Partic. fem. *Ἐν-ιασσα*, epithet of Demeter, for *\*i-ατ-ια*: Skr.

*y-at-í*. — With thematic vowel: indic. pres. *εἰσ-ίουσι* pret. Hom. *ἴ-ε ἦ-ε ἦ-ομεν* Att. imper. *ἰ-ό-ντων* opt. *ἴ-ο-ι* partic. *ἰ-ό-ντ-* (cp. J. Baunack, Curt. Stud. x 96 ff., Rhein. Mus. xxxvii 472), and compare conj. *ἴ-ω ἴ-ω-μεν*.

*φθαι-* 'destroy' = Skr. *kṣay-*: 3<sup>rd</sup> sing. mid. *ἔ-φθι-το*: Skr. imper. *kṣi-dhí*. Conjunctive *φθί-ε-ται*; in Skr. we should expect *\*kṣay-a-tē* on the analogy of *kṣi-dhí* (cp. indic. *kṣay-a-ti*). Partic. *φθί-μενο-ς*. — Whether *φθίω* (*ἔφθιεν*, Σ 446) is *φθικ-ω* or *φθι-ω* is not clear; cp. § 527 Rem.

✓ *λεμ-* 'loose': mid. 3<sup>rd</sup> sing. *λύ-το* *λῦ-το*, 3<sup>rd</sup> pl. *λύ-ντο* (cp. § 1068).

1<sup>st</sup> pl. *ἴθ-μεν* (Att. *ἴσμεν*) 2<sup>nd</sup> pl. *ἴσ-τε* may be connected with the sing. *\*μειδ-μι* or *οἰδ-α*, it matters not which; see § 493 p. 52.

*εἰμι* 'I am', Idg. *\*és-mi*, see § 493 p. 52. 2<sup>nd</sup> sing. *εἶ* for *\*é(σ)ι* = Skr. *ási*, also *εἶς* (*εἷς*) and *έσ-σι*, see § 987. 1. 3<sup>rd</sup> sing. *έσ-τι* (*έσ-τι*): Skr. *ás-ti*. 1<sup>st</sup> pl. *εἰμὲν* (Dor. *εἰμές*) for *\*έσμεν* shows the strong stem for the weak (cp. O.Icel. *er-o er-u* § 507), like the 2<sup>nd</sup> pl. *έσ-τε* and the 3<sup>rd</sup> pl. Ion. *έσσι* for *\*έσ-αντι*; Att. *έσμεν* follows *έστέ* in having *σ*. The 3<sup>rd</sup> pl. Dor. *έντι* Att. *εἰσὶ* instead of *\*έντι* = Goth. *sind*, Idg. *\*s-enti* (§ 1020. 1); for the breathing compare *όντ-* instead of *\*ό-ν-τ-* § 493 p. 53. With 3<sup>rd</sup> pl. Dor. *έντι* goes the participle Dor. *έντ-*, nom. pl. *έντ-εις* whose fem. *έσσα* is a transformation of *\*άσσα* (cp. Skr. *s-at-í*). Pret. 1<sup>st</sup> sing. Hom. *ἦα* Att. *ἦ* for *\*έσ-η*, 3<sup>rd</sup> sing. Dor. *ἦς* for *\*έσ-ι*, 1<sup>st</sup> pl. *ἦμεν* for *\*ἦσ-μεν* (I § 565 p. 410), 2<sup>nd</sup> pl. *ἦσ-τε*, 3<sup>rd</sup> pl. Dor. etc. *ἦν* for *\*ἦ(σ)-εν* = Skr. *ás-an* (§ 1020. 1), also Boeot. *παρ-εῖαν* for *\*ἦαν* (§ 1021. 1); for the augment, see § 480 p. 28, § 481 pp. 29 f. 1<sup>st</sup> sing. *ἦν* 2<sup>nd</sup> pl. *ἦτε* are re-formates caused by preterites like *ἐβλήν*, Class X, the point of contact being *ἦμεν*. The 3<sup>rd</sup> sing. Hom. *ἦεν* Att. *ἦν* is probably identical with 3<sup>rd</sup> pl. Dor. *ἦν* for *\*ἦ(σ)-εν*; the Indicative had adopted *-αν* (*-σαν*) in other forms in place of 3<sup>rd</sup> pl. *-εν* (§ 1021), and thus *ἦεν* ceased to be a clear plural, beginning with sentences like *ἂ δὴ τετελεσμένα ἦεν* (Σ 4), *ἐνθα μάλιστα μάχη*

καὶ φύλοπις ἦεν (N 789). In the dialect of Herodotus ἦα became εἶα (I § 611 p. 462), whence by analogy εἶα-ς εἶα-τε, cp. § 504. On ἦσθα and Hom. εἴσθα εἴην ἦην, see §§ 583, and 858. 2. Imper. ἴσθι for Idg. \**z-dhi* with prothetic vowel (I § 626 p. 470); and Hecataeus has εἴσθι with the strong stem introduced. The old conjunctive (Skr. *ās-a-ti ās-a-t* Lat. *er-i-t*) was lost in the historic period, and in its place we find εἶω εἶομεν ὦ ὦμεν like Skr. *as-ā-t*. Opt. εἴην for \**ē-s-ih-n* or \**ē-s-ih-n* with the strong tense-stem (cp. § 943). — There is connexion between 1<sup>st</sup> pl. ἐμὲν in Callimachus, the Thess. 1<sup>st</sup> sing. ἐμὶ, and Hom. inf. ἔμεν ἐμεναι: either on the analogy of εἰσὶ: τιθεῖσι (Dor. ἐντι: τίθεντι) and of εἴην: τιθείην, infinitives were formed to match with τίθεμεν and τιθέμεναι (cp. Mess. conj. ἦνται and Hom. conj. μετ-ήω (§ 934); or the parallel forms εἶσι: ἴασι, εἶω: ἴω and so forth gave the impression that the two verbs were distinguished by having one ε and the other ι before the same endings, and thus ἐμὲν and ἔμεν(αι) came into existence on the analogy of ἴμεν (1<sup>st</sup> pl.) and ἴμεν(αι). In any case, ἐμὶ was not made until after ἐμέν. — The enclisis of εἰμὶ, as of φημι, is due to the fact that the finite verb was always enclitic in the original language; see I § 669 p. 534, and Wackernagel, Kuhn's Zeitschr. xxiii 457 ff. — On the thematic forms (\**s-o-* and \**es-o-*), see § 493 p. 53.

ἦ 'said' (with pr. Greek ἦ) for \**h<sub>1</sub>κ-τ* (I § 652. 5 p. 496), cp. Skr. *āh-a* Lat. *ājō*. The ablaut in the root needs explaining (cp. Lat. *ad-āgium: prōd-igium*). In the mould of φῆν φῆην, φημι, φησι beside φῆ φῆη (pr. (†r. *phā-*) were cast ἦν, ἦμι, ἦσι.

√*dh<sub>2</sub>-* 'place': ἔ-θε-μεν etc., see § 493 p. 53. Similarly, from √*sē-* 'send forth, let go, sow': εἴμεν pr. Gr. \**ē-(s)ε-μεν* (cp. § 478 p. 26), unaugmented κάθ-ε-μεν ἀφ-έ-την, ξύρ-ε-το; Fick's comparison (Wtb. I<sup>4</sup> 13 f.) with Skr. *sā-* in *āva-sā-* 'let go' (3<sup>rd</sup> sing. *ā-sā-t* 2<sup>nd</sup> dual *si-tam*) is unsafe.

√*dō-* 'give': ἔ-δο-μεν etc., see § 493 p. 53. Similarly from √*kō-* 'to be sharp, have one's wits sharpened by

experience' (Gr. *κῶν-ρο-ς*, Lat. *cōs ca-tu-s*, O.Ir. *cath* 'wise'): *ἰ-κο-μεν* ἡσθόμεθα and *κόν* εἰδός Hesych., cp. partic. *δόν*.

✓ *bhā-* 'show, make open, declare': *φη-μι* Dor. *qā-mi* 1<sup>st</sup> pl. *φα-μὲν* 2<sup>nd</sup> pl. mid. *φά-σθι*, cp. § 495 p. 55.

✓ *stā-* 'stare': *ἰ-στη-ν* ἔ-στη-μεν, 2<sup>nd</sup> sing. mid.-pass. *ἰ-στά-σθης* (: Skr. *á-sthi-thās*, § 503) etc., see § 493 p. 54, § 495 p. 55.

§ 503. A number of forms of the 2<sup>nd</sup> sing. pret. mid. with the personal ending *-σθης* = Skr. *-thās* were the foundation for the *σθην*-aorist, *ἰ-κτά-σθης* = Skr. *á-kṣa-thās* beside *ἀπ-έκτατο* (§ 502 p. 64), *ἰ-τά-σθης* = Skr. *á-ta-thās* from ✓ *ten-* 'stretch', *ἰ-φθί-σθης* beside *ἔ-φθι-το* (§ 502 p. 65), *ἰ-σύ-σθης* beside *ἔ-σσυ-το* ἔ-συ-το (§ 504), *ἰ-τέ-σθης* = Skr. *á-dhi-thās* beside *ἔ-θι-το* from ✓ *dhē-* 'place' (§ 493 p. 53), *ἰ-δό-σθης* = Skr. *á-di-thās* beside *ἔ-δο-το* from ✓ *dō-* 'give' (§ 493 p. 53), *ἰ-στά-σθης* = Skr. *á-sthi-thās* from ✓ *stā-* 'stand' (§ 493 p. 54). See §§ 589 and 1049. 2.

§ 504. Some preterite tenses of this sort form a subclass apart, in having developed from the *-α* of the 1<sup>st</sup> pers. sing. and *-αν* in the 3<sup>rd</sup> plural, a flexion like the *s*-aorist (*-σα -σας* etc.), in which the strong stem appeared instead of the weak in the active plural and dual and in the middle voice.

✓ *gheu-* 'pour': *ἔ-χε(ς)-α*, Aeol. (Hom.) *ἔχεν-α* 3<sup>rd</sup> sing. mid. *ἔ-χυν-το* *χύ-το*: Skr. 2<sup>nd</sup> sing. *hó-ṣi*. From this beginning we have *ἔχτας* *ἔχενας* *ἔχετ* *ἔχιντε* *ἔχίσμεν* *ἔχίσμεν* and so forth, instead of \**ἔ-χενς* \**ἔ-χεν* \**ἔ-χυν-μεν*, and middle *ἔχενάτο*. ✓ *gíeu-* 'set in motion, drive' (Gr. *σεεφ-* *σεφ-*, I § 489 p. 360): Aeol. (Hom.) *ἔ-σσενα* *σεῖα* imper. *σύ-θι* ἔλθι (Hesych.) 3<sup>rd</sup> sing. mid. *ἔ-σσυ-το* *σύ-το*. Hence *ἔ-σσενας* and so on, also middle *σεύατο*. Similarly *δέατο* 'videbatur' doubtless is due to \**ἔ-δεα* = \**e-dei-η*: Skr. redupl. *á-dī-dē-t* imper. *dī-di-hi* (*δοάσασατο* with the root-grade *doi-* is derived from some noun). Herodotus has *ἔας* and *ἔατε* from *ἔα* 'eram', see § 502 p. 66.

Of the same sort are the reduplicated *ῥν-εγκ-α ῥνεγκας* etc., and *εἰπ-α εἰπας* (*Feip-* = *\*ue-ug-*); see §§ 557, 569. Parallel to *ῥνεγκα* is the form *ῥν-εικα*, which is not reduplicated, but is derived from another root and compounded with the preposition *ἐν-* (the Author, Idg. Forsch. i 174); *ῥνεικα* too received the inflexion of the *s*-aorist.

It is easy to understand how this amalgamation with the *s*-aorist came about, if we may assume that the first step was to change the 3<sup>rd</sup> person singular active. This would become *\*ἐν-ει(κτ)*, and if in its stead was used a form with the thematic vowel, *ἐν-εικε* (beside *συν-ενείκεται* Hesiod), and similarly *ἔχε(F)ε* (from *ἔχου*) replaced *\*ἔ-χευ*, and *ἔσπευε* (beside *ἔσσεινύμην*) replaced *\*ἔ-σσευ*, and so forth, the rest followed naturally: for *-α* in the first and *-ε* in the third person brought the forms into direct relation with the *s*-aorist. *ἔας ἔατε* are late, and copied straight from *ἔχεας ἔχετε*.

Remark. According to Fick (Gött. gel. Anz. 1881, pp. 1432 f) and others, in all these preterites the 2<sup>nd</sup> sing. (*-α-*), 2<sup>nd</sup> pl. (*-α-τε*), etc., contain original dissyllabic roots ending with *ο* (= Gr. *α*), in which case they will belong to our Class IX. For instance, *χεφα-* in *ἔχας* is connected by these scholars with Skr. *havi-* in *haviṣ-*. This view seems to me less probable. Even granting it, however, confusion with the *s*-aorist is not by any means excluded.

§ 505. Italic. A peculiarity of Latin is the combination of thematic and non-thematic forms to make up the persons of the present indicative. A first pers. sing. in Idg. *-mi* cannot be proved for Italic.

✓ *bher-* 'bear': Lat. *fer-t*: Skr. *bhár-ti*; 2<sup>nd</sup> pl. *fer-tis* imper. *fer-te* have taken the strong stem, like Gr. *φείρ-τε* (§ 502 p. 64), and like Skr. 2<sup>nd</sup> dual *bhar-tám* beside the regular *bhṛ-tám*. The 2<sup>nd</sup> sing. indic. *fer-s* and the 2<sup>nd</sup> sing. imper. *fer* both represent the Idg. injunctive *\*bher-s*: *fer* is regular (as *par* for *\*pars* and the like, I § 655 p. 506), but *fer-s* has had *-s* added again.<sup>1)</sup> In the pres. indic., *ferō*

1) That *fer* comes from *\*fere*, as Pauli asserts (Altlt. Stud., IV 29), I do not believe. If *fere* in the Song of the Arval Brethren really means 'bring', this, and no other, would represent Idg. *\*bhere*; and *fere* would stand to *fer* as Marruc. 3<sup>rd</sup> sing. pres. *fere-t* to Lat. *fer-t*.

*ferimus ferunt* have a thematic vowel. Umbr. *fertu* 'ferto' may be identical with Lat. *fer-tō*, or it may be the same as the thematic Gr. *φερε-τω* (see I § 633 p. 474).

✓ *uel-* 'wish': Lat. 2<sup>nd</sup> sing. injunct. *vel* for \**uel-s* (I § 655 p. 506), now a particle,<sup>1)</sup> 2<sup>nd</sup> pl. *voltis* for \**ul-tes*: Skr. *á-vṛ-ta* etc., see § 493 p. 51. 3<sup>rd</sup> sing. *volt* instead of \**vel-t*. On 2<sup>nd</sup> sing. *veis vis*, see below. Optative: *vel-i-m vel-ī-mus*, like (Goth. 1<sup>st</sup> pl. *vil-ei-ma* (1<sup>st</sup> sing. *viljau*), with strong stem,<sup>2)</sup> as contrasted with Skr. 3<sup>rd</sup> sing. mid. *vur-i-ta* for \**ull-i-to* (see p. 51 footnote); in consideration of *nōli nōlite nōlitō* (*nōlō* for *ne-volō* as *mālō* for \**mag(e)-volō mavolō*, cp. I § 432 c p. 322 on the word *avilla*), this irregularity may be easily explained on the supposition that there was an indic. \**uel-(i)lō* \**uel-i-s* (Class XXVI), which is represented by O.H.G. 1<sup>st</sup> sing. *willu* Goth. inf. *viljan* partic. *viljands* O.C.Sl. *velja veli-ši* etc. (§ 727).<sup>3)</sup> — With thematic vowel indic. pres. *volō*, *volumus volimus* (§ 530), *volunt*, for \**ull-ō* etc. Umbr. *veltu* 'eligitō' is as ambiguous as *fertu*, see above.

Lat. 2<sup>nd</sup> sing. *vei-s vi-s* (beside *in-vītu-s*), alien forms absorbed into the conjugation of *volō*: Skr. *vē-ti* 'presses on, strives' 3<sup>rd</sup> pl. *vy-ānti*.

✓ *ei-* 'go': 2<sup>nd</sup> 3<sup>rd</sup> sing. Lat. *ei-s i-s* and *i-t* ground-forms \**ei-s* and \**ei-ti*, see § 493 p. 51. The *i-* (also written *ei-*) of the present of the Latin finite verb, *i-mus i-tis i-tur i-te* etc., should strictly be *i-*, cp. Skr. *i-más* etc. This is doubtless not the (weak grade) *i* of Skr. *i-mahē* Gr. *ἵ-ο-μεν* (p. 52), but the strong grade *ei-*, cp. Peln. *ei-te* 'ite'. The rare Lat. 3<sup>rd</sup>

1) Compare Umbr. *heris* — *heris* 'vis — vis' = 'vel — vel'. Originally it was no doubt a question: 'will you have this? will you have that?'

2) I do not consider that proof has been shown for deriving *velim* from \**volim* by vowel assimilation. *vel* shows that Latin had the grade *uel-* in this root.

3) A different account of Lat. *nōli* may be seen in Kuhn's *Zeitschr.* xxx 313 (Wackernagel's), and Stolz, Lat. Gr.<sup>2</sup> pp. 378, 379.



pl. *iat* was coined to complement *imus* on the strength of *sta-nt* : *stū-mus*, *ple-nt* : *plē-mus* etc.

Partic. *iēns* like *prae-s-ēns* (II § 126 p. 396, and IV p. 50, footnote). With thematic vowel *eō* for *\*ei-ō*, *eunt*, partic. *eunt-is* etc., and the conj. *eam*: cp. Skr. indic. mid. *āy-a-tē*, *ambū ambunt* are doubtless not to be compared with Gr. *in eis-inon* etc. (pp. 52, 65): they must be a re-formation following *finio*, the compound being treated like a simple word.

✓ *es-* 'be': 3<sup>rd</sup> sing. Lat. *es-t*, Umbr. *est est* Osc. *est ist*: Skr. *ās-ti*, § 493 p. 52. 2<sup>nd</sup> sing. *es* for *\*es-s*, also *ēs*, the latter perhaps augmented (§ 480 p. 28). Weak stem *s-* in the 3<sup>rd</sup> pl. Umbr. *s-ent* Osc. *s-et*. The 2<sup>nd</sup> pl. Lat. *es-tis* has taken the strong stem, like Gr. *ēσ-rē*. Conjunctive: Lat. *erō er-i-s* etc. with future meaning (§ 910). Optative: 2<sup>nd</sup> sing. Lat. *s-iē-s* *s-ī-s* Umbr. *sir si sei*, see § 946. To the the thematic stem *s-o-* belong 1<sup>st</sup> sing. Lat. *s-u-m* Osc. *súm sum* for *\*s-o-m*, the injunctive form, 1<sup>st</sup> pl. Lat. *sumus simus* (so too *possumus possimus*, cp. *volumus volumus* above) for *\*s-o-mos*,<sup>1)</sup> 3<sup>rd</sup> pl. Lat. *s-o-nt sunt* Falisc. *sunt*, partic. Lat. *sōns sont-is* (cp. the Author, Bericht der sächs. Ges. der Wiss., 1890, pp. 230 ff.).

Remark 1. Side by side with *potis sum* (*poti-s* 'mighty, powerful, able' = Gr. *nó-a-*), for which a plural *potis sumus* was formed instead of *\*potēs sumus* after *potis* had crystallised (cp. Skr. *dātāsmas* 'we will be giving' instead of *dātārah smas*, and like phrases), was a variant *pote sum*. *pote* is an adverb (acc. sing. neut. for *\*poti*, or loc. in orig. -ē, see III § 280 p. 160), cp. *bene sum, tūlō sum. potisset potisse* are for *potis 'asset 'sse*, op. *situst* for *situs 'st*. But *potes potest potestis* come from *pote es* etc. So also *possum possim* (whence *possem posse* by complementary analogy) come from *\*potsum \*potsim, pote-sum, pote-sim*. It is doubtful, however, whether -e- disappeared by regular syncope, or whether *potest* : *est* suggested *\*potsum* : *sum* (I § 501 p. 367).

✓ *ed-* 'eat': *ēs ēst ēstis ēste*, pass. *ēstur* (on -st- instead of -ss- -s- see I § 501 Rem. 2 p. 368); with thematic vowel *edō edimus edunt*, also *edis edit* etc. See § 480 Rem. pp. 28 f., § 494 pp. 54 f., § 498 p. 60. Optative: *ed-i-m ed-ī-mus* instead

1) I § 110 page 105 should be corrected by this statement.

of *\*d-ī-*, perhaps to distinguish this optative from the old optative of *dō-* 'give' (see below).

✓ *dhē-* 'place': Lat. *con-di-mus con-di-tis crēdimus* for *\*fa-mos \*fa-tes*: Gr. *ἔ-θε-μεν*, see § 493 p. 53. The forms *-dō -dis -dit -dunt* are thematic.

✓ *dō-* 'give': Lat. *da-mus da-tis red-dimus -ditis*: Gr. *ἔ-δο-μεν*, see § 493 p. 53. 1) Imperative: *ce-do* (2<sup>nd</sup> pl. *ce-tte* for *\*ce-date \*ce-dite*, I § 633 p. 474), see § 957. The old optative stem *\*d-ī-* (cp. Avest. 3<sup>rd</sup> sing. *d-ya-ḥ*) is found in Osc. *da-did* 'dedat'; to this the conj. *da-dad* Lat. *dē-dut* is related like Lat. *ed-ā-mus : ed-ī-mus* (see above). The old singular forms *\*dō-m \*dō-s \*dō-t* are gone; we have instead *dō dās dat*. The last two represent the stem used in composition for the conjunctive, *d-ā-* (cp. *-bas* for *\*bhū-ā-s* indie. beside conj. *fu-ā-s*, see § 578); and these created *dō* on the analogy of *stō : stās, flō : flās* etc. In composition, we see the same inflexion as *legō* has: *vēn-dō red-dō -dis -dit -dimus -diti -dunt*. But undoubtedly *-dimus -ditis* are what *\*damus \*datis* must regularly become, cp. fut. O.Lat. *reddibō* for *\*red-dabō*.

Remark 2. The compounds of *dhē-* and *dō-* were confused in Latin, beginning with the 1<sup>st</sup> and 2<sup>nd</sup> plural; *-di-* = *\*fa- \*dha-* and = *\*da- \*dā-*. Compare Darmesteter, *De conj. Lat. verbi dare*, Paris 1877; Postgate, *Dare*, 'to give' and *-dere* 'to put', *Trans. Phil. Soc.* 1880—81 pp. 99 ff.; Thielmann, *Das verbum dare im Lat.*, Leipzig 1882; the Author, *Liter. Centr.* 1882 col. 1389 ff.

Whether the forms *stā-s sta-t* from ✓ *stā-* 'stand' are rightly placed here with the rest, as is suggested by Skr. *ā-sthā-t* and Gr. *ἔ-στη* (§ 493 p. 54), is very doubtful because of *stā-mus stā-tis*. One cannot see why an orig. *\*stā-mus* (cp. *dā-mus*) should have been altered (*ἔστημεν* as compared with *ἔδομεν* is quite a different thing, see § 495 p. 55); and so it

1) Bréal (*Mém. Soc. Ling.*, VII 326) thinks he may regard as an un-augmented preterite *dat* in Vergil's *cratera antiquom quem dat Silonia Dido* (Aen. IX 286). Many points in Vergil's manner are in favour of Bréal's assumption (see Ladewig on Aen. I 79, II 275, Kühner *Ausf. Gr.* II 90).

is preferable to refer the whole present of this verb *stō* to *\*stā-īð*; see § 584 Rem., § 706. This is supported by Umbr. *stahu* 'sto'.

§ 506. Keltic.  $\sqrt{es-}$  'to be',<sup>1)</sup> 3<sup>rd</sup> sing. O.Ir. *is* O.Cymr. *iss* *is* for *\*es-ti*. 3<sup>rd</sup> pl. O.Ir. *it* O.Cymr. *int* for *\*s-enti* (II p. 196, footnote). The *a-* of the Irish proclitic sing. 1<sup>st</sup> pers. *am* 2<sup>nd</sup> *at* (3<sup>rd</sup> relat. *as*), plur. 1<sup>st</sup> *ammi* 2<sup>nd</sup> *adib* (3<sup>rd</sup> rel. *ata*), is from *-e*. The form *am* then had no *-i* at the end; and since it is usually written *am* with one *m*, it seems to have had *m* spirant, like Mid.Cymr. *wyf*. It must therefore not be derived from *\*esmi*. The 2<sup>nd</sup> sing. *at* Mid.Cymr. *wyt* may contain the pronoun of the 2<sup>nd</sup> person, and may thus be explained as *\*esi+t-*. Mid.Cymr. 1<sup>st</sup> sing. *wyf* seems to be due to the analogy of the 2<sup>nd</sup> sing. Is Ir. *am* the same? Others regard these forms as coming from the root *ei-* 'go'. The 1<sup>st</sup> pl. *ammi* Mid.Cymr. *ym* may be *\*esmesi*. In the 2<sup>nd</sup> pl. *adib*, *-b* is certainly an affixed personal pronoun, and *-di-* the ending of the 2<sup>nd</sup> pl. = *-thi -the* (ground-form *\*-tesi*, the suffix re-formed on the analogy of the 1<sup>st</sup> pl., see § 1014). This brings us back to an imaginary ground-form *\*s-e-tesi + s-*, which would be a re-formate following the 3<sup>rd</sup> pl. *\*senti*; and so perhaps the 1<sup>st</sup> pl. should be derived from *\*s-esmesi*, a later contamination.

Again, the Keltic *t*-preterite, as it is called, is partly of the same kind. In the 3<sup>rd</sup> sing. of this preterite, the ending *-t* is said to represent the middle ending *\*-to* (Strachan, Bez. Beitr. XIII 128 ff., and Zimmer, Kuhn's Zeitschr. xxx 204 ff.): e. g. O.Ir. *as-bert* 'dixit' Mid.Cymr. *kymberth* 'sumpsit' for *\*kymberth* from  $\sqrt{bher-}$ . When *-t* ceased to be understood as a personal ending, the other persons which completed the tense were formed on the model of stems ending in *-t*: O.Ir. sing.

1) Compare Zimmer, Kelt. Stud. II 133; Stokes, The Neo-Celtic Verb Subst., 43 ff., Kuhn's Zeitschr. xxviii 93 ff.; d'Arbois de Jubainville, Mém. Soc. Ling., v 239 f.; Strachan, Bez. Beitr. xv 114 ff. In the text I follow chiefly information received from Thurneysen.

1<sup>st</sup> pers. *-burt* 2<sup>nd</sup> *-birt*, plur. 1<sup>st</sup> *-bartmar* 2<sup>nd</sup> *\*-bartid* 3<sup>rd</sup> *-bartatur*. Compare Lith. *eitù* 'I go' formed from *ẽĩ-t* 'he goes' = Skr. *ẽ-ti* § 686 Rem. 2, Gr. *ẽđóθην* from *ĩ-đó'-θης* = Skr. *á-di-thās* § 589. In forms like *as-bert* Strachan sees root-aorists of this class, Zimmer *s*-aorists (*\*ber-s-to*). As a matter of fact, both these aorists may have been the source for some preterites such as these. To our Class I belong O.Ir. *ro-ẽt* 'he took' for *\*-em-to*, Mid.Cymr. *gwan-t* 'percussit, feriit'.

§ 507. Germanic. *√ uel-* 'wish': opt. Goth. *viljau* pl. *vilei-ma* O.H.G. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *wili* O.Icel. 1<sup>st</sup> sing. *vilja*. The strong stem (cp. Skr. *vr-iyā-t* *ur-ĩ-ta*), like that of Lat. *velim*, is due to a confusion with the indic. *\*uel-(i)ñō- \*uel-ĩ-* (O.H.G. *willu* O.C.Sl. *velja*). See § 493 p. 51, § 505 p. 69, § 928.

*√ \*gem-* 'go, come': opt. A.S. *cyme* = Goth. *\*kumjan*: Skr. *gam-yā-m*, see § 493 p. 51.

*√ es-* 'to be', see § 493 p. 52. The indicative forms are Goth. *im, is, ist, sijun sium, sijuþ siuþ, sind*; O.H.G. *bim, (bist bis), ist, birum, birut, sint*; O.Icel. *em, est, es* (Run. *is*), *erom erum, erod̃ eruð, ero eru*. First it must be mentioned that the O.H.G. 2<sup>nd</sup> sing. *bist bis* belongs to a present to be described below in §§ 707 and 722, formed from *√ bhey-*, namely 1<sup>st</sup> sing. *\*bhy-ĩñō* 2<sup>nd</sup> sing. *\*bhy-ĩ-si* etc. (A.S. 1<sup>st</sup> sing. *béo* 2<sup>nd</sup> sing. *bis* 3<sup>rd</sup> sing. *bið*, O.Ir. *biu* etc.), and that the similarity of *bis* and *\*is* (= Goth. *is*) produced *b-im b-irum b-irut*. 1<sup>st</sup> sing. Goth. *im* O.H.G. (*b-*)*im* for *\*immi \*ismi* = Skr. *ás-mi* (I § 582 Rem. 2 p. 436); O.Icel. *em* instead of regular *\*im* following the plural forms which begin with *e*, whence also the *e* in *est* and *es*. Whether the 2<sup>nd</sup> sing. Goth. *is* comes from Idg. *\*esi* or *\*es-si* (see § 984.1), cannot be decided; O.Icel. *est* like O.H.G. *bist* has *-t* on the analogy of the preterite (§ 990.3); on the very rare O.Icel. 2<sup>nd</sup> sing. *es*, see Noreen in Paul's Grundr. I 515. The 3<sup>rd</sup> sing. Goth. O.H.G. *ist* is for Idg. *\*es-ti*; O.Icel. *es* (Run. *is*) A.S. O.Sax. *is* are doubtless the old injunctive Idg. *\*es-t*; the 3<sup>rd</sup> pl. O.Icel. *er-o* is also injunctive (other explanations are suggested by J. Schmidt, Kuhn's Zeitschr. xxv 593; von Fierlinger, *ibid*.

xxvii 440 footnote 2; Noreen, *loc. cit.*; Osthoff, *Perf.* 428 f.). In the plural, the weak stem is seen in Goth. *s-ind* O.H.G. *s-int* = Idg. *\*s-enti*. O.Icel. *ero eru* is pr. Germ. *\*iz-unþ* (§ 1025.1 b), an injunctive in which the strong stem has taken the place of the weak (cp. Gr. *ἔασι*, § 502 p. 66). As the ending of *\*izunþ* agreed with the so-called preterite-presents, such as Goth. *mun-un* (§ 508), on their analogy the 1<sup>st</sup> pl. O.Icel. *erom* O.H.G. *(b-)irum* and the 2<sup>nd</sup> pl. O.Icel. *erod* O.H.G. *(b-)irut* appeared. These forms then produced O.H.G. Frank. *sind-un* O.Sax. A.S. *sind-un*. Goth. *sijum sijup* are probably transformed from *\*iz-um \*iz-uþ*, caused partly by *sind*, partly by the feeling that the opt. *sijau sijáis* etc. should contain a stem *sij-*. — The optative has always a weak root: 1<sup>st</sup> sing. Goth. *s-ijau* O.H.G. *s-i* O.Icel. *s-jā*; on the inflexion, see § 947. — Partic. *\*s-und-* = Idg. *\*s-nt-* in Goth. *sunjis* 'true' for *\*sund-ju-* = Skr. *sat-yá-* 'true'; also thematic *\*s-o-nt-* in *\*sanþ-a-* 'true, truthful' A.S. *sōð* O.Icel. *sannr* (cp. § 493 p. 53).

O.H.G. *tuom* 'I do' (O.Sax. A.S. *dō-m*) must be derived from *√ dhē-*, along with the pret. *te-ta* and the subst. *tā-t* (Goth. *ga-dē-di-*) and others, but its vowel makes it impossible to derive the word from *\*dhē-mi*. Perhaps it contains *\*dh-a-* (Class X, § 585), found in other parts of the verb as a conjunctive stem (Lat. *con-da-m -dā-mus*); cp. Lat. 2<sup>nd</sup> sing. *d-ā-s* 'thou givest' = conj. *(red-)dās* (§ 505 p. 71, § 937).

Remark. On O.H.G. *stām stēm* 'I stand' and *gām gēm* 'I go', see § 708. They certainly do not belong to this class of presents.

§ 508. Some Preterite-Presents may also be placed in this class. Goth. *mun-un* 'they think', opt. 1<sup>st</sup> pl. *mun-ei-ma*: Skr. mid. 3<sup>rd</sup> sing. *á-ma-ta* partic. *man-andá-s*, *√ men-* 'think, mean'. Goth. *ga-daúrs-un* O.H.G. *gi-turrun* 'they dare', opt. Goth. *ga-daúrs-ei-ma* O.H.G. *gi-turr-ī-m*: Skr. partic. *dhṛṣ-āṇá-s*, *√ dhers-* 'dare'. Goth. *vīt-un* O.H.G. *wizz-un* 'they know', opt. Goth. *vīt-ei-ma* O.H.G. *wizz-ī-mēs*: Skr. *vēt-ti* opt. *vid-yā-t* etc., see § 493 p. 52; the weak forms of this verb were present and perfect at the same time.

If this view be right, Goth. *mun-un ga-daúrs-un vit-un* were originally injunctive, like Icel. *er-o er-u* (§ 507 p. 73). We shall meet again with present forms among the preterite-presents (§§ 646, 887, 893).

§ 509. Connected with Skr. *ír-tē* imper. Avest. *ar°-šva* Gr. *ᾔρ-σο*, which point to an Idg. mid. pres. *\*ǵ-taǵ* (mentioned above, § 497, page 57) are A.S. 2<sup>nd</sup> sing. *ear-ð ar-ð ear-t* 'thou art' pl. *ear-un ar-on* with *ar-* = Idg. *\*ǵ-*. For the meaning cp. Gr. *ᾔρ-ωq-u*, which in late Greek had also the meaning 'I am'. On the 2<sup>nd</sup> sing., see § 990. 3.

Remark. Germ. *ar-* was probably not a perfect stem, which would have been *ör-*. This is said to correct the note in Idg. Forsch. I 81.

Von Fierlinger (Kuhn's Zeitschr. xxvii 436 ff.) deduces some other presents with weak stem and secondary accent, from thematic forms with peculiar vocalism. Thus, for Goth. *fara* 'I fare, go', *✓per-* (in Gr. *περάω* 'I pass through' etc.), he assumes an older present stem *\*pǵ-*, 1<sup>st</sup> pl. *\*pǵ-més* (cp. Skr. 2<sup>nd</sup> sing. *pár-ṣi*).

§ 510. Balto-Slavonic. To Idg. *\*ueǵd-mi* 'I see' belong Lith. *veizd-mi*, and imperative Lith. *veizdi veizd* O.C.Sl. *viždī*, — the imperative forms have non-original strong stem, and the O.C.Sl. form has *ž* instead of *z*, see § 493 p. 52, §§ 949, 962. An undoubted re-formate is Lith. *pa-výzdmi* instead of *pa-výdžiu* 'invideo', also used (cp. § 511).

Idg. *\*es-mi* 'I am', see § 493 p. 52. The Lithuanian forms here to be cited are scattered over various dialects. 1<sup>st</sup> sing. Lith. *es-mi* O.C.Sl. *jes-mǐ*; on the analogy of thematic verbs with *-u* Lith. *esmū* (like Lett. *esmu* Pruss. *asmu*), and then a 2<sup>nd</sup> person *esmi* was made on the analogy of *sukl : sukū*. 2<sup>nd</sup> sing. Lith. *esi* (Pruss. *assai assei asse essei*) O.C.Sl. *jesi*, see § 991. 3<sup>rd</sup> sing. Lith. *ēs-ti ēs-t* (Pruss. *ast est*) O.C.Sl. *jes-tū*. The 1<sup>st</sup> and 2<sup>nd</sup> pl. may have taken *es-* instead of *s-* in pr. Balto-Slav.: Lith. *ēs-me ēs-te* (Pruss. *asmai, astai asti estei*) O.C.Sl. *jes-mū jes-te*. Partic. Pruss. *-sins* dat. *-sentismu*: cp. Lat. *-sēns* and Gr. Dor. *ἴνν-ες* (p. 50 footnote). —

\*s-o- in O.C.Sl. 3<sup>rd</sup> pl. *sqtū* partic. Lith. *sąs sanczio* O.C.Sl. *sy sqsta*. \*es-o- in Lith. 1<sup>st</sup> sing. *esù* 1<sup>st</sup> pl. *esame* 2<sup>nd</sup> pl. *esate* partic. *ėsąs*. It is not clear whether Lith. opt. (permissive) 3<sup>rd</sup> sing. *tesė* 'sit' is to be analysed *te-sė* (cp. Pruss. 2<sup>nd</sup> pl. opt. *sei-ti*) or as *t-esė*. With augment pr. Balto-Slav. \*es-o-m etc.: in O.C.Sl. this occurs in the imperfects *nesě-achū -aše -aše* pl. *-achomū -ašete -achq*, unthematic 2<sup>nd</sup> pl. *-as-te* also found (so too the dual has both *-asta -aste* and *-ašeta -ašete*), see § 903; in Lith. the preterite *ē*- passed into the present, *esù est ėsa esame esate* partic. *ėsąs*, see § 480 p. 28. — On Lith. 3<sup>rd</sup> sing. *grà*, which comes from the root of Skr. *īr-tē* Avest. *ar'-šva* Gr. *ῥο-ωρ-α* A.S. *ear-ā*, see J. Schmidt in Kuhn's Zeitschr. xxv 595 f.

The present of *✓ed-* 'eat' was in pr. Balto-Slav. \*ēd-mi; for its *ē* see § 480 Rem. pp. 28 f., § 494 p. 54. Lith. sing. 1<sup>st</sup> pers. *ėmi* 'I devour' 3<sup>rd</sup> sing. *ėsti est* pl. 1<sup>st</sup> *ėme* 2<sup>nd</sup> *ėste* dual 1<sup>st</sup> *ėdva* 2<sup>nd</sup> *ėsta* (on *ėdmi ėdme* see I § 547 p. 401); O.C.Sl. sing. 1<sup>st</sup> pers. *jamŕ* 2<sup>nd</sup> *jasi* 3<sup>rd</sup> *jastū* pl. 1<sup>st</sup> *jamŭ* 2<sup>nd</sup> *jaste* 3<sup>rd</sup> *jad-ętū* (on 1<sup>st</sup> dual *javě* instead of \**jadvě*, see I § 547 Rem. 3, p. 401). — Also thematic Lith. *ėdu ėdi* etc., Pruss. opt. 2<sup>nd</sup> pl. *idaiti* O.C.Sl. partic. *jady jadašta*.

Other presents of this class are found in one only of the two branches, Baltic or Slavonic, not in both:

§ 511. In Lithuanian there is a fine array of present forms of this class, but nearly all are defective and have only one or two persons left, chiefly the first and third. Some of them have come into this class quite late. Compare § 496 p. 56. Lists of *mi*-forms may be found in Schleicher pp. 250 ff., Kurschat pp. 304 ff., Bezzenberger Beitr. lit. Spr. 198 ff. (a few more come from the dialects).

We begin with those which may be regarded as representing Idg. originals.

*pa-velmi* 'I will' 2<sup>nd</sup> sing. *pa-velt*, refl. 1<sup>st</sup> sing. *velmė-s*: Skr. *á-vṛ-ta* etc., see § 493 p. 51.

*ei-mi* 'I go': Skr. *é-mi* etc., see § 493 p. 51. 2<sup>nd</sup> sing. *ei-si* 3<sup>rd</sup> sing. *ei-ti ei-t*. The strong stem passes into the

plural: 1<sup>st</sup> *ei-me* 2<sup>nd</sup> *ei-te*; but 2<sup>nd</sup> pl. High Lithuanian *eĩste* on the analogy of *ėste*: *ėme*, *dūste*: *dūme*. Old injunctives are *ei* 'let him go' (*te ne ei* 'let him not go') *ei-mè* 'let us go' (dual *ei-và*). Imper. *ei-k* = Lat. *i* (§ 957). Indic. now usually *ei-nù*, as Class XIII (§ 615). Pruss. 2<sup>nd</sup> sing. *ēi-sei* 3<sup>rd</sup> sing. *ēi-t* 1<sup>st</sup> pl. *ēi-mai*. Partic. Lith. *ent-* 'going' (in old printed books) doubtless stands for *\*i-ent-*, first in compounds with prefix ending in a consonant, such as *isz-ent-* (I § 147 p. 132), cp. p. 50 footnote; but it is possible that it comes from *\*iē-nt-*. Class X; see § 593. — *\*i-o-* appears to be contained in Pruss. opt. 2<sup>nd</sup> sing. *jeis* 2<sup>nd</sup> pl. *jeiti*.

*lėk-mì* 'I remain' 3<sup>rd</sup> sing. *lėk-ti* *lėk-t*: Skr. 2<sup>nd</sup> dual *rik-tam* 2<sup>nd</sup> sing. mid. *rik-thās*, *√ leiq-* 'linquere'.

*ráudmi* 'I lament' (regularly *\*raumi*, I § 547 p. 401): Avest. 3<sup>rd</sup> sing. mid. *raostā* with irregular strong stem (cp. § 499 p. 62), *√ reyǵ-* 'rudere'; cp. Skr. *rōdi-ti* pl. *rudi-mas* § 574.

*deg-mì* 'I burn': Skr. 2<sup>nd</sup> sing. *dhákṣi*, see § 493 p. 53.

*sėdmi* 'I sit' 3<sup>rd</sup> sing. *sėst* 1<sup>st</sup> pl. refl. *sėdmė-s*: Skr. 2<sup>nd</sup> sing. *sát-si*, *√ sed* 'sedere', see § 494 pp. 54 f.

*jūs-mi* 'I gird' (beside *jūs-siu*): Avest. 3<sup>rd</sup> sing. *yās-ti*, stem *jōs-*. Compare § 656.

The imperatives *dě-k* 'lay' (inf. *dě-ti*, *√ dhē-*) and *dū'-k* 'give' (inf. *dū'-ti*, *√ dō-*), of which the latter must be compared with Lat. *ce-do*, show the same formation as *ei-k* (= Lat. *i*). O.Lith. *dū-di* *dū-d* 'give' doubtless = *\*dō-dhi*. See I § 547 Rem. 1 p. 401, IV §§ 546, 957, 962.

Some other presents of the same sort, to which there is nothing which answers outside the Baltic group, may here be named: *bar-mi* 'I scold' 3<sup>rd</sup> sing. *ap-bart*, *√ bher-* (Lat. *feriō*), *bar-* for *\*bhǵ-*; *snėk-ti* 'it snows', *√ sneigh-*; *mėg-mì* 'I sleep' 3<sup>rd</sup> sing. *mėkt* 2<sup>nd</sup> pl. *mėkte*; *rāug-mi* 'I belch', *√ reyǵ-* (Gr. *ῥεύουαι*);<sup>1)</sup> *sėrg-mi* 'I protect, watch' 3<sup>rd</sup> sing. *sėrkti*; *kósmi* 'I cough' (Skr. *kās-a-tē*).

1) On account of a form *riáuymi*, Wiedemann (Lit. Praet. 186) derived this word from a groundform *\*rēyǵ-mi* (cp. § 494 pp. 54 f.); which is very dubious.



All these verbs have in Lithuanian, beside this present formation, another with the same meaning, which in High Lithuanian is almost the only one. It is certainly no mere chance that in so many presents of the *mi*-class, the *bye*-form is a verb in *-iu* with accentuated root (1<sup>st</sup> pl. *-i-me* Class XXVI § 727), as *sėdžiu*, *sėrgiu*, *kósiu*, *žydžiu* (*žýdmi* 'I bloom'), *cziaudžiu* (*cziaudmi* 'I sneeze'), *stóvtu* (*stóvmi* 'I stand'), *mėrdžiu* (*mėrdmi* 'I lie a-dying') etc. With these verbs in *-iu*, the 2<sup>nd</sup> and 3<sup>rd</sup> sing. ran together and became indistinguishable in form (2<sup>nd</sup> sing. *-i* for *\*-ii*, 3<sup>rd</sup> sing. *-i* for *\*-i-t*), and it is probable that it was a wish to keep these persons distinct which first produced the non-thematic forms in most of these verbs. Perhaps on the analogy of *sėst(i)* (*sėdmi*) beside *sėdžiu* was formed *sėrkt(i)* etc.

Observe also *tenk-mi* instead of *tenkù* 'I last' (pret. *tekaù* inf. *tėktì*), and the 2<sup>nd</sup> pl. *gėlbste* (*gėlpste*), from *gėlbmi* 'I help' 3<sup>rd</sup> sing. *gėlbt(i)* *gėlpt(i)*, — for its *s*, compare that of *ėĩ-s-te* § 511 p. 77.

§ 512. Slavonic. The form only without parallel in Lithuanian is *se-tŭ* 'inquit', explained in § 493 p. 52.

## Class II: Root + Thematic Vowel forming the Present Stem.

§ 513. This class of present stems, invariably the largest in all Indo-Germanic languages, falls into two divisions, according as the accent falls (A) upon the root syllable or (B) upon the thematic vowel. When the root carried the accent, it was of the strong grade (1<sup>st</sup> strong grade in the *e*-series), but weak grade if the accent fell upon the thematic vowel; e. g. (A) *\*bhēydh-o-* = Skr. *bōdh-a-* Gr. *πεύθ-ο-* (*bōdh-a-ti* *πεύθ-ο-μαι* *πεύθ-ε-σθαι*); (B) *\*bhudh-ó-* = Skr. *budh-á-* Gr. *πυθ-ό-* (*budh-á-nta* *ἐ-πύθ-ε-το* *πυθ-έ-σθαι*), from *√bheydh-* 'wake, notice, learn'. The indicative often gives both forms from the same root, particularly often in Aryan and Greek. This we see in the above example; others are Skr. *tár-a-ti* : *tir-á-ti* 'oversteps, passes',

*kārṣ-a-ti* : *kṛṣ-ā-ti* 'draws, ploughs', *sārp-a-ti* 'crawls' : *ā-syp-a-t* ; (ir. Att. *τρέπ-ω* : Dor. *τράπ-ω* (instead of \**τραπ-ω*) 'I turn', *λείπ-ω* 'I leave' inf. *λείπ-ειν* : *ἔ-λιπ-ο-ν* inf. *λιπ-εῖν*, *ἔχ-ω* 'I have' inf. *ἔχ-ειν* : *ἔ-σχ-ο-ν* inf. *σχ-εῖν* ; Lat. *ic-ō* : *ic-ō*, *rūd-ō* (O.H.G. *riugu*) : *rud-ō* ✓ *reud-*.<sup>1)</sup> Goth. *veiha* 'I fight' pr. Germ. \**uēix-ō* : O.Icel. *veg* 'I compel' pr. Germ. \**uiž-ō*, Goth. *trud-a* 'I tread' : O.H.G. *trit-u* ; O.C.Sl. *der-a* 'I tear' : Czech *dr-u* Serv. *-dr-em*, O.C.Sl. *žid-a* 'I wait' (Lith. *geidžiū*) : *žid-a*, Lith. *mélž-u* 'I milk' : O.C.Sl. *mlŭz-a*. The two kinds are often found in different languages with the same root ; as from ✓ *dhreugh-* 'hurt, deceive' Aryan has only \**drughō-*, Skr. 2<sup>nd</sup> sing. *druh-a-s* etc., and Germanic only \**dhreughō-*, O.H.G. *triugu*.

To decide the historical relation of these two kinds, two facts have to be taken into account. First, that in Aryan and Greek, Type *B* constantly expressed aorist action, and *A* present action.<sup>2)</sup> Secondly, that type *A* is conjunctive to indicative forms of Class I, and *B* often occurs as a variant indicative stem along with stems of Class I, no distinction being drawn between these two present stems in meaning ; see §§ 493 ff. How these facts are to be explained is still obscure. Only thus much may be called probable, that Type *A* had originally both indicative and subjunctive meaning (cp. § 489 pp. 47 f., §§ 578, 910).

Remark. Because of the frequency with which these two types (II *A* and *B*) are found in the same verb, many scholars, among them Fick and Paul, have supposed that from different persons of the same stem, we have the two stems *bhéydh-o* *bhéydh-e-* and *bhudh-ō* *bhudh-é-* by levelling ; originally, they assume, the varying accent produced \**bhéydh-o-* and \**bhudh-é-* (e. g. 1<sup>st</sup> pl. \**bhéydh-o-mos* but 2<sup>nd</sup> pl. \**bhudh-é-te*) ; then, by levelling, we have 2<sup>nd</sup> pl. \**bhéydh-e-te* beside \**bhudh-é-te* following \**bhéydh-o-mos*, and *vice versa* we have \**bhudh-ō-mos* beside

1) I here assume that *icō* comes from \**eicō* and *rūdō* from \**roydō* \**reudō*. But this is not certain ; for *i* und *ū* may represent Idg. *i* und *ū*.

2) Type *B* is found distinguishing the aorist sense from other present stems, and not only those of the *A* type ; as Skr. *āchida-t* Lat. *scidi-t* (§ 528), but pres. Skr. *chināt-ti* opt. *chindē-ta* Lat. *scindō*.

\**bhédh-o-mos* following \**bhudh-é-te*, and so on.<sup>1)</sup> This must have happened, if it did happen, in the proethnic language, because even then the type \**bhudhó-* had become associated with aoristic action, and \**bhédho-* with the meaning of the conjunctive.

To explain the relation of II *A* and *B*, others call attention to the change of accent in the Balto-Slavonic present indicative, as Lith. *vedù vedì vėda*. But the original accent of the Balto-Slavonic verb, which is the important point, has not yet been made out for certain; the only certain point is that the 1<sup>st</sup> sing. accented its final, Lith. *vedù sukù* = Russ. *vedú skú*. And even if the accentuation varied then in the different persons, how can it be proved that this mode was older than the Sanskrit?

The same double forms are seen in Class XIII (as Gr. *δηλομαι: βούλομαι*, § 607), and Class XXVI (as O.H.G. *wirk(i)u*: Goth. *vairkja*, § 705). What may be the cause of the difference is no less dark in these than in the other.

§ 514. Class II *A*: the Root Syllable accented and in the strong Grade. Some forms are used as both indicative and conjunctive, as. indic. Skr. *áy-a-tē* Lat. *eō eunt*, conj. Skr. *áy-a-ti áy-a-t* (beside indic. *ē-ti*); see § 493 ff. Here we confine ourselves to *o*-forms with indicative meaning.

Pr. Idg. *bhér-ō* 'I bear' 3<sup>rd</sup> sing. \**bhér-e-t(i)*: Skr. *bhár-ami bhár-a-ti*, Armen. *ber-em* (§ 978) *berē* for \**ber-e-ti* (I § 483 p. 357), Gr. *φέρω*, Lat. *fer-ō*, O.Ir. *-biur* for \**ber-ō ber-i-d*, Goth. *baír-a baír-i-þ*, O.C.Sl. *ber-e-tŭ*; pret. 3<sup>rd</sup> sing. \**é-bher-e-t*: Skr. *á-bhar-a-t*, Armen. *e-ber*, Gr. *ἔφερον*; imper. 2<sup>nd</sup> sing. \**bhér-e*: Skr. *bhár-a*, Armen. *ber*, Gr. *φέρε*, O.Ir. *beir*, Goth. *baír*; opt. 2<sup>nd</sup> sing. \**bher-o-i-s*; Skr. *bhár-ē-ṣ*, Gr. *φέρω-ις*, Goth. *baír-á-i-s*, O.C.Sl. *ber-i*. \**gén-ō* 'I beget': Skr. *ján-ami*, Gr. 'pret. *ἔγενετο* (§ 518), O.Lat. *gen-ō*. \**uḗ-ō*: Avest. *vay-ēmi* 'I drive, scare off', Lith. *vej-ù* 'I pursue'. \**pléu-ō* 'I swim, flow, sail': Skr. 3<sup>rd</sup> sing. mid. *pláv-a-tē*, Gr. *πλέω*, Lat. 3<sup>rd</sup> sing. \**plov-i-t* (imperf. *plovēbat* Petron., inf. *per-plovere*

1) Such levelling as this would not be extraordinary. For instance, the present of Lat. *vindicō* becomes in O.Fr., regularly, *venge venches venchet vengons rengiez venchent*; from this we have two series derived, (1) *venge vengies venget vengons vengiez vengent*, and (2) *venches venche venchet venchons venchiez venchent* (Neumann, Zeitschr. Rom. Phil., xiv, 562).

Fest.), O.C.Sl. 3<sup>rd</sup> sing. *plov-e-tŭ*. \**yért-ō* 'verto': Skr. *várt-ami*, Lat. *vert-ō*, Goth. *vairþ-a*. \**lénogh-ō*: Skr. 3<sup>rd</sup> sing. mid. *rāh-a-tē* 'hastens, accelerates', O.Ir. *lingid* 'springs up' (R. Schmidt, Idg. Forsch. I 48 ff., 76), O.H.G. *gi-lingu* 'I have good progress or result'. \**nés-e-taj*: Skr. *nás-a-tē* 'approaches lovingly, joins company with some one', Gr. *vé(σ)-ε-ται* 'returns home', Goth. *ga-nis-a* 'I am saved, survive, recover'. \**géys-ō* 'I taste, try, enjoy': Skr. *jōṣ-āmi* Gr. *γεύ-ω γεύ-ο-μαι* (cp. the Author Gr. Gr.<sup>2</sup> p. 31), Goth. *kius-a*. \**yégh-ō* 'veho': Skr. *váh-ami*, Gr. Pamphyl. imper. *ἴεχ-ί-τω* (?), Lat. *veh-ō*, Goth. *ga-viga*, Lith. *vež-ù* O.C.Sl. 3<sup>rd</sup> sing. *vez-e-tŭ*. \**ség-e-taj* 'is with, follows': Skr. *sác-a-tē*, Gr. *ἔπ-ε-ται*, Lat. *sequ-i-tur*, O.Ir. *sech-idir* (now a weak verb), Lith. *sek-ù*. \**pég-ō* 'I cook': Skr. *pác-āmi*. Lat. *coqu-ō* for \**quequ-ō* \**pequ-ō* (I § 336 p. 267), O.C.Sl. 3<sup>rd</sup> sing. *peč-e-tŭ*. \**dág-ō* 'I drive, lead': Skr. *dj-āmi*, Armen. *ac-em*, Gr. *ἄγ-ω*, Lat. *ag-ō*, O.Ir. *ag-im*, O.Icel. infin. *aka*.

On present forms with Idg. *ē* in place of *e*, as Gr. *μῆδ-ο-μαι* Lith. *bég-u* Skr. *sāh-āmi mārj-āmi*, see § 471 p. 16, § 480 Rem. pp. 28 f., § 494 pp. 54 f. To the same list perhaps belongs the West-Germ. 2<sup>nd</sup> sing. pret., as O.H.G. *māgi* AS. *māte* 'measurest' (Gr. mid. *ἐ-μῆδεο -ov*), O.H.G. *āzi* 'atest' (Lith. *ėd-u* 'to eat', but cp. the augmented Skr. *ād-a-s* Gr. *ἤδ-ε-ς*), see § 893.

§ 515. Aryan. Skr. *bhár-a-ti* 'fert' Avest. *baraiti*, pret. 3<sup>rd</sup> pl. Skr. *á-bha-ra-n* Avest. *bar-e-n* O.Pers. *a-bar-a*: Armen. *ber-em* etc., see § 514 p. 80. Skr. *nám-a-ti* 'bows' Avest. *nemaiti*, ✓ *nem-*. Skr. *náy-a-ti* 'leads' Avest. *nayēiti* O.Pers. pret. 1<sup>st</sup> sing. *a-nay-a-m*. Skr. *cyáv-a-tē* 'raises itself, stirs' Avest. *šavaitē* O.Pers. pret. 1<sup>st</sup> sing. *a-šiyav-a-m*: Gr. Aeol. *σεύω*, ✓ *qieu-*. Skr. *párd-a-tē* 'farts': Gr. *πέφδ-ε-ται*, O.H.G. *firz-u*, Lett. *perd-u*. Skr. *śás-a-ti* 'utters solemnly, praises' Avest. *savəghaiti* Gathic *səvəghaiti* 'speaks, teaches', ✓ *kens-*. Skr. pret. *á-bandh-a-t* 'he bound' Avest. *bandaiti*: Goth. *bind-a*, ✓ *bhendh-*. Skr. *bhéd-a-ti* 'splits': Goth. *beit-a* 'I bite', ✓ *bheid-*. Avest. *snaēš-aiti* 'it snows' (I § 454 p. 335): Gr. *ρείψ-ει*, Lith. dial. *snėg-a* Lett. *sntg*, ✓ *sneigh-*. Skr. *bódh-a-ti*

'wakes, awakes, is observant' Avest. mid. *baodaitē*: Gr. *πύθ-ε-ται* 'learns, discovers', Goth. *ana-biuda* 'I bid, command', O.C.Sl. *bljud-e-tŭ* 'observes', with secondary (*l*)j,  $\sqrt{bheudh-}$ . Skr. *pāt-a-ti* 'flies' Avest. *pat-e-nti* 'they fall, run' O.Pers. *ud-apatata* 'he raised himself': Gr. *πέτ-ε-ται* 'flies', Lat. *pet-ō*. Skr. *āj-a-ti* 'leads, drives' Avest. *azaiti*: Armen. *acem* etc., see § 514 p. 80. Skr. *ārḥ-a-ti* 'earns, deserves' Avest. *arējaiti*: Gr. pret. *ἤλαφ-ο-ν* 'I earned',  $\sqrt{algh-}$ .

§ 516. Sanskrit had so many presents of Class II *A* with *á* in the root syllable, that other stems which had originally *a* unaccented in the root, accented it on their analogy; e.g. *\*dāṅk-é-ti* 'bites' properly becomes *\*daśáti*, but what we find is *dáśati*, cp. also *daś-a-ti* from *\*deṅk-e-ti*. See I § 672 p. 537. But this retraction of accent is found with other root vowels as well, not *a* only; as *gírāmi* beside *girāmi* (§ 525); cp. *hínv-a-ti hí-nv-a-nti* in contrast with *hi-nō-ti hí-nv-ánti* § 651.

§ 517. Armenian. *berem* 'I bring, carry': Skr. *bhārāmi* etc., see § 514 p. 80. *celem* 'I split', beside Lith. *skelù* (*skel-ŭt*) 'I split'. *e-ker* 'he ate': Skr. 3<sup>rd</sup> sing. *gar-a-t* (should be *\*jar-a-t*, but follows *girá-ti* and others),  $\sqrt{ger-}$ . *e-tes* 'he saw' (*tes-* for *\*ters-*, I § 263 p. 214): Skr. *á-darś-a-t*, Gr. *δέρξ-ε-ται*, O.Ir. *con-dercar* 'conspicitur',  $\sqrt{derk-}$ . *liz-em* 'I lick': Gr. *λείχ-ω*.

Remark. Whether the *i* of *gitem* 'I know' was Idg. *e<sub>i</sub>*, which would connect the verb with Skr. *vēd-a-tē* Gr. *εἰδ-ε-ται*, or Idg. *o<sub>i</sub>*, which would make it a transformation of the perfect (Gr. *οἶδα*), is not to be decided, Bartholomae's efforts notwithstanding (Bezz. Beitr. xvii 94 f.). The meaning does not prove a perfect origin for it.

§ 518. Greek. *δέρ-ω* 'I flay'; Goth. *ga-taira* O.H.G. *zir-u* 'I tear to pieces, I destroy', O.C.Sl. *der-e-tŭ* 'tears to pieces'. *στεν-ω* 'I groan, bewail': Skr. *stun-a-ti* 'thunders, roars'. *ῥέ(F)-ει ῥεῖ* 'flows': Skr. *srāv-a-ti*. *ῥέ(F)-ω* 'I run': Skr. *dhav-a-tē* 'streams, flows' (on *dhāv-a-ti* see § 480 Rem. p. 29). *τέρ-ω* 'I satisfy, please': Skr. *tārp-a-ti*. *ἀμέλγ-ω* 'I milk': O.H.G. *milch-u*, Lith. *mélž-u*. *εἶδ-ο-μαι* 'I appear, am like': Skr. *vēd-a-tē*. *πείθ-ω* 'I persuade': Lat. *fīd-ō*, Goth. *beid-a*

'I await'. *εὔ-ω* 'I burn' Ion. *εὔ-ω* (cp. the Author, Gr. Gr.<sup>2</sup> p. 31): Skr. *ḍṣ-a-ti*, Lat. *ūr-ō*, √ *ems-*; *εὔ-ω* for \**εὐhō* as *εἰπόμην* for \**ἐλεπόμην*, see § 478 p. . *ἔρενθ-ω* 'I redden, make red': O.Icel *rǫð* (inf. *rǫðða*), √ *reydh-*. *στέγ-ω* 'I cover': Skr. *sthaḡ-a-ti* (grammarian's word), Lat. *teg-ō*. *ἔχ-ω* 'I hold, have': Skr. *sáh-a-tē* 'overcomes' (on *sáh-a-ti* see § 480 Rem. p. 29). *ζέ-ω* 'I seethe, boil': Skr. *a-yas-a-t*, O.H.G. *jis-u gis-u*, √ *jes-*. *αἶθ-ω* 'I burn', √ *aīdh-* (I § 93 p. 87, § 318 p. 237). *τήκ-ω* 'I melt' Dor. *τάκ-ω*, *λήγ-ω* 'I cease', √ *slēg-* (I § 565 p. 423).

Since the preterites *ἐγενόμην* 'I became' *ἔθενον* 'I struck' *ἔλλον* 'I seized' were used as aorists, their infinitives and participles were accented like forms of Class II *B*: *γενέσθαι*, *ἐλῶν*, *θενών* instead of \**γενίσθαι*, \**ἔλων*, \**θένων*. As regards the aorists *ἔτεκον* 'I bore, begot' and Dor. Lesb. *ἔπετον* 'I fell' (*τεκεῖν*, *πετών*), these may possibly belong by rights to II *B*, and may have exchanged their *ə* for *e* (cp. Bartholomae, Bezz. Beitr. xvii 109). Compare § 527.

§ 519. Italic. Lat. *fer-ō*, cp. Umbr. conj. *ferar* 'let him bear' (*fertu* 'ferto' for \**fere-tōd*?): Skr. *bhár-a-ti* etc., see § 514 pp. 80 f.). *col-ō* for \**quel-ō* (I § 172.3 p. 152): Skr. *cár-a-ti* 'moves, goes', Gr. *πέλ-ε-ται* 'is in motion, versatur' (this should really be *τελ-*, but follows the analogy of *ἐ-πλ-ε-το* etc., see I § 427 *b* with Rem. 1, pp. 313 f.), √ *qel-*. Lat. *sonō* (inf. *sonere*) for \**syen-ō* (cp. *colō*): Skr. *sván-a-ti* 'sounds, echoes'. *trem-ō*: (Gr. *τρέμ-ω* 'I tremble' (cp. § 488 p. 47). *ex-uō* for \**omō* \**emō* (cp. Umbr. *an-onihimu* 'induimino' § 716). *serp-ō*: Skr. *sárp-a-ti* (Gr. *ἔρπ-ει* 'crawls'. *deic-ō* *dic-ō*, Umbr. *deitu* teitu 'dicio' (I § 502 p. 368), cp. Osc. *deicans* 'dicant': Goth. *ga-teiha* 'I announce, inform', √ *deiĥ-*. Lat. *mējō* probably for \**meihō* (I § 389 p. 291, § 510 p. 374): Skr. *méh-a-ti* Avest. *maezaii*, Armen. *miz-em*, A.S. *mīz-e*, √ *meiġh-*. *doucō* *dūcō* for \**deyk-ō*: Goth. *tiuh-a* 'I draw' √ *deyk-*. *ed-ō*: (Gr. *ἔδ-ω* Goth. *it-a* (on Lith. *ėd-u* see § 480 Rem. pp. 28 f.). *tex-ō*: Skr. *tákṣ-a-ti* 'makes'; Gr. *τέκτων* prevents our deriving the

present from *\*tek-se-ti*, and putting it in Class XX; see I § 554 p. 408, Kretschmer, Kuhn's Zeitschr. xxxi 433. Lat. *ag-ō*, Umbr. *aitu aitu* Osc. *actud* 'agito' (I § 502 p. 368): Skr. *áj-a-ti* etc., see § 514 p. 81. Lat. *scab-ō*: Goth. *skab-a* 'I scrape, shave' (I § 346 p. 271).

§ 520. Keltic. Irish Presents of the 1<sup>st</sup> and 3<sup>rd</sup> conjugations (*o-* and *io-*stems) are so often confused that the distinction between them cannot be made of any practical use. This makes it quite uncertain whether the following specimens belonged to Class II originally or not.

O.Ir. *-biur ber-im* 'I bear, bring': Skr. *bhár-a-ti* etc., see § 514 p. 80. *cel-im* 'I hide': O.H.G. *hīl-u* 'I hide' (it is doubtful whether to add Lat. *oc-culō*, as being for *\*celō*, or to place it in II B). *mel-im* 'molo', √ *mel-* (O.C.Sl. *mel-jā* inf. *mlě-ti*). *con-dercar* 'conspicitur': Skr. *á-darś-a-t* etc., see § 517 p. 82. *reth-im* 'I run': cp. Lith. *rit-ù* 'I roll' (II B). *ē-rig* (Mid.Ir.) imper. 'raise yourself, rise': Gr. *ὀρέγ-ω* 'I reach', Lat. *reg-ō*. *lengim* 'I spring' 3<sup>rd</sup> sing. *lingid*: Skr. *rāh-a-tē* etc., see § 514 p. 81. *scendim* (Mid.Ir.) 'I spring', Mod. Cymr. *cy-chwynnaf* 'I spring up', pr. Kelt. *\*skyend-*: it appears to be connected with Skr. *skánd-a-ti* 'springs' Lat. *scandō*, but the vowels are not clear (cp. Kretschmer in Kuhn's Zeitschr. xxxi 379, R. Schmidt Idg. Forsch. I 75 f.). *tiag-im* 'I go': Gr. *οἰτίζ-ω* 'I go', Goth. *steig-a* 'I climb', √ *steigh-*. *fed-im* 'I lead': Lith. *ved-ù* 'I lead' O.C.Sl. *ved-e-tū*, √ *yedh-*. *tech-im* 'I flee': Skr. *tak-a-ti* 'runs, pushes, shoves' (in the grammarians), Lith. *tek-ù* 'I run, flow' O.C.Sl. *teč-e-tū* 'runs, flows'. *can-im* 'I sing': Lat. *can-ō*.

§ 521. Germanic. Goth. *ga-tatra* O.H.G. *zir-u* 'I tear, destroy': Gr. *δέφ-ω* etc., see § 518 p. 82. O.H.G. *brim-u* 'I growl, roar': Lat. *frem-ō* (cp. Osthoff, M. U., V 93 ff., Per Persson Stud. zur Lehre der Wurzelerweiterung, 288). Goth. *ga-patrsa* 'I dry up': Gr. *τέρσ-ε-ται* 'dries'. O.H.G. *wirr-u* 'I mix up, confuse' (instead of *\*wirs-u* by analogy of *gi-worran* and other such, where *-rr-* comes from *-rz-*, cp. I § 582 Rem. 1 p. 435): Lat. *verrō* for *\*vers-ō* (also *vorrō*). O.H.G.

*smīl-z-u* 'I melt': Gr. μέλδ-ε-ται 'melts, liquefies'. Goth. *bind-a* O.H.G. *bint-u* 'I bind': Skr. *ā-bandh-a-t*, √ *bhendh-*, see § 515 p. 81. Goth. *leihv-a* O.H.G. *līh-u* 'I lend': Gr. λείπ-ω Lith. *lėk-ù* 'I leave', √ *leiḡ-*. O.H.G. *sīhu* 'I strain, filter': Skr. *sēc-a-tē* 'pours', √ *seḡ-*. Goth. *vis-a* O.H.G. *wis-u* 'I remain, linger': Skr. *vās-a-ti* 'lingers, dwells'. Goth. *qīp-a* O.H.G. *quid-u* 'I say, speak'. Goth. *skáid-a* O.H.G. *sceid-u* 'I sever', √ *skhaḡt-* *skhaḡd-* scindere.<sup>1)</sup> Goth. *áuḡ-a* 'I increase (trans. or intr.)', √ *aug-*. Goth. *lēt-a* O.H.G. *lāz-u* 'I leave': cp. Gr. ληθεῖν· κοπιᾶν, κερμηκέναι Hesych. (Sütterlin, Habilitations-Thesen p. 3) and Lat. *lassu-s*; the *d* of *lēd-* is perhaps a root-determinative (§ 699).

§ 522. Balto-Slavonic. Lith. *gen-ù* 'I drive', O.C.Sl. *žen-e-tū* 'drives': Skr. *han-a-ti* Avest. *janaiti* 'strikes, kills' (§ 498 p. 58), Gr. ἔ-θεν-ο-ν θεν-εῖν 'strike' (§ 518 p. 83). O.C.Sl. *pīje-tū pije-tū* 'drinks' (inf. *pi-ti*) probably for \**peḡ-e-ti* (cp. *poji-ti* 'to give to drink'): Skr. *páy-a-tē* 'swills, strains', cp. § 535. O.C.Sl. *slov-e-tū* 'is called' for \**slev-e-tū*: Gr. κλέ(φ)-ε-ται 'celebratur', √ *kley-*. Lith. *kert-ù* 'I hew': Skr. *kartati* 'cuts' (instead of \**cart-a-ti*, following *kṛt-a-* *kṛnt-a* etc.), √ *qert-*. O.C.Sl. *brězetū* 'cares for, tends' for \**berg-e-tū* (I § 281 p. 224, § 464 p. 340): Goth. *batrg-a* 'I keep, preserve' O.H.G. *birg-u* 'I save, hide', √ *bhergh-*. Lith. *bred-ù* 'I wade', O.C.Sl. *bred-e-tū* 'wades'. Lith. *velk-ù* 'I drag, pull', O.C.Sl. *vlěč-e-tū* 'drags, pulls' (like *brězetū* above): Gr. ἔλκ-ω 'I drag, pull', √ *ḡelq-* *ḡelq-*. Lith. *les-ù* 'I pick': Goth. *lis-a* 'I pick, gather'. Lett. *strīg-u* 'I sink in' (= Lith. \**sträg-ù*), O.C.Sl. *striž-e-tū* 'shears, shaves': O.H.G. *strīhh-u* 'I strike, stroke', √ *streḡ-*. Lith. *lėk-ù* 'I leave': Gr. λείπ-ω etc., see § 521 p. 85. O.C.Sl. *žid-e-tū* 'waits': cp. Lith. *geidžiu* 'I desire after' (Class XXVI). O.C.Sl. *bljud-e-tū* 'observes': Skr. *bódh-a-ti* etc., see § 515 pp. 81 f. Lith. *deg-ù* 'I burn', O.C.Sl. *žež-e-tū* 'burns' for

1) Not *sqhaḡt-*, as assumed in I § 553 p. 406. See Hübschmann, Zeitschr. deutsch. morg. Ges., xxxviii 424 f., Burg, Kuhn's Zeitschr. xxix 367.



\**geg-e-tū* and this for \**deg-e-tū* (cp. Russ. *iz-gaga* 'heart-burn':<sup>1)</sup> Skr. *dāh-a-ti* 'burns', √ *dhegh-*. Lith. *pesz-ù* 'I pluck': Gr. *πείω* 'I shear'. Lith. *kós-u* 'I cough': Skr. *kás-a-tē* 'coughs'.

§ 523. Class II B: the Accent falls upon the thematic Vowel, and the Root is Weak.

This class may have been produced by adding a thematic vowel to forms of Class I with the weak stem; see § 491, page 50.

Pr. Idg. \**grr-ō* 'I swallow' 3<sup>rd</sup> sing. \**grr-é-t(i)*, √ *ger-*: Skr. *gir-āmi gil-āmi*, O.C.Sl. *žir-e-tū*. \**mll-ō-* from √ *mel-* 'grind' (O.Ir. *melim*, II A, § 520 p. 84): Armen. *mal-em* 'I shatter, crush', Lat. *mol-ō*, Mod. Cymr. *mal-af* 'I grind'. \**gmm-ō-* \**gm-ō-* from √ *gem-* 'go, come' (Goth. *gim-a*): Skr. opt. *gam-ē-t* Avest. *g'm-a-p ym-a-p* O.Pers. mid. *a-gm-a-tā*, O.H.G. *cum-u* (I § 227 p. 193); whether Lat. conj. *ad-venat* (properly \**-vem-ā-t*, but changed by analogy of *veniō -ventu-s*, see I §§ 207, 208 pp. 174 f.) and Osc. indic. *kúmbened* 'convēnit' (*-n-* instead of *-m-* as in Latin) should be placed here or in Class II A is uncertain; — and a parallel stem, Idg. \**gém-ti* § 493 p. 51. \**uyn-ō-* from √ *uen-* 'win, love': Skr. opt. 1<sup>st</sup> pl. *van-ē-ma* (conj. *van-ā-ti*), Goth. *un-vunands* 'not rejoicing'.<sup>2)</sup> \**ym-ō-* from √ *nem-* 'take': Lat. *emō*, Lith. *imù* O.C.Sl. *imq*; see I § 219 Rem. 2 p. 187, § 238 p. 199; Solmsen in Kuhn's Zeitschr. xxix 81; Brückner, Arch. slav. Phil., x 183 (not so Fick, Wtb. I<sup>4</sup> 363, Wiedemann Lit. Praet. 118). \**bhuu-ō-* \**bhu-ō-* from √ *bhey-* 'become, be': Skr. 3<sup>rd</sup> sing. *á-bhuv-a-t bhúv-a-t* (for the accent, see § 525)

1) Vol. I § 379 Rem. p. 286, should be corrected. It can hardly be right to separate *žegq* from *degù*, as Miklosich does (Etym. Wörterb. 407).

2) A comparison of *un-vunands* with forms like *kunnum* = Idg. \**gñ-nu-més* (§ 646) shews that *n* and *m* following *ṽ* and *ṽ* as transition-consonants or consonant glides were pronounced more weakly than when they had their ordinary value. Thus it would be better to write \**uṽṽ-ō-*, and on the same principle \**bhu\*-o-* (= Skr. *bhúv-a-t*), \**du\*ō* (= Gr. *δύω*) rather than \**bhuu-o-* \**duu-ō*. The difference is seen in pr. Gr. \**hek\*etwǝ* = *ἥκται* an (*h*)*ikwos* = *ἥκτος*.

Avest. 3<sup>rd</sup> sing. *bv-a-p* 3<sup>rd</sup> pl. *būn* i. e. *buv-e-n*, Lat. aor. (perf.) *fui-t* (compare conj. Osc. *fuid* = \**fu-ē-t* and O.Lat. *fu-ā-s*) fut. *-bō- bunt* for \**-fy-o-* (§ 899) Osc. indic. aor. *aa-mana-ffed* 'mandavit' = Avest. *bv-a-p* (§§ 874, 899), O.Ir. *no charub* for \**cara-b(y)ō* (*cara-*? § 899), O.C.Sl. 3<sup>rd</sup> pl. injunct. *bq* for \**by-o-nt* (§ 727); it is not certain that Gr. *φύω* belongs to this class, as it may be derived from \**φv-λω* (we have in Aeolic *φύω* § 527 Rem., § 707). \**qrt-ó-* from *√qert-* 'cut': Skr. *á-kṛt-a-t*, O.C.Sl. *črŭ-e-tŭ*. \**dṛk-ó-* from *√derk-* 'see': Skr. 3<sup>rd</sup> pl. *á-dṛś-ā-n* opt. *dṛś-ē-t*, Gr. *ἔ-δραx-o-ν* inf. *δραx-εῖν*. \**mlġ-ó-* from *√melġ-* 'stroke, milk': Skr. *mṛj-á-ti* 'strokes off, cleans', Mid. Ir. *blegain* 'I milk', O.C.Sl. *mlŭz-e-tŭ* 'milks'. \**dñk-ó-* from *√deñk-* 'bite': Skr. *dás-a-ti* (for the accent, see § 516 p. 82, § 525), Gr. *ἔ-δax-o-ν* (I § 224 p. 192). \**rud-ó-* from *√reyd-* 'lament': Skr. *rud-á-ti* Lat. *rud-ō* O.H.G. 2<sup>nd</sup> sing. pret. *rugg-i* for \**rut-i-z* (§ 893). \**uid-ó-* from *√ueid-*: Skr. *á-vid-a-t* 'he found' Avest. Gathic *vīd-a-p*, Armen. *e-git* 'he found', Gr. *ἰδ-ον* Lesb. *ἔ-ῑδ-o-ν* 'I saw' inf. *ἰδ-εῖν*, inf. Goth. *vit-an* O.H.G. *wizz-an* 'know'. \**s-ó-* from *√es-* 'be': Lat. *s-u-m s-u-mus s-u-nt*, partic. Gr. *ῶν* Lat. *sōns* O.Icel. *sannr* Lith. *sąs* O.C.Sl. *sy*, see § 493. \**dh-ó-* from *√dhē-* 'τίθέναι': Skr. *dh-a-t*, Lat. *con-dō*, see § 493 pp. 52 f. Goth. *magan* 'be able' partic. *magands*, O.C.Sl. *moga* 'I can', beside Gr. *μῆχος* 'help, remedy' (*η* = *ā*), cp. § 887.

§ 524. Aryan. Skr. *sphur-á-ti* 'pushes away, accelerates', *√sper-*; Avest. *sparaiti* may belong either to II A or II B (cp. I § 290 p. 232). Skr. *tir-á-ti tur-á-ti* 'presses or passes through', *√ter-*. 3<sup>rd</sup> pl. *r-a-ntē*, *√er-* 'set in motion'. Imperative: *jñ-a*, *√ġen-* 'know'. Optative: *san-ē-t*, *√sen-* 'win', cp. I § 231. *kṣiy-á-ti kṣy-á-ti* 'lingers, dwells'. *a-khy-a-t* 'he looked' (in composition), variant stem *khy-ā-* § 736. Optative: 1<sup>st</sup> pl. *huv-ē-ma* pret. *á-hv-a-t* from *hā-* 'call to', *√ġheṃ-*. *dhuv-a-ti* 'shakes': is Gr. *θύω* 'I offer' the same as this, or does it come from \**θv-λω*? see § 527 Rem. *suv-á-ti sv-á-ti* 'begets creates'. *syj-á-ti* 'sends forth', Avest. *her\*z-aiti*. Skr. *bhṛj-á-ti* 'roasts' (perf. *babhrája* and *babhárja*): Gr. *φρίγ-ω* Lat. *frīg-ō*,

Idg. \**bhr̥zg-é-ti* or *bhr̥gg-é-ti* (cp. Thurneysen, Kuhn's Zeitschr. xxx 353). *á-vrt-a-t*, √ *uert-*: does Lat. *vortō* (beside *vertō*) come from pre-Italic \**uirt-ō*? 3<sup>rd</sup> pl. *spūrdh-d-n* beside *spārdh-a-tē* 'strives', *spūrdh-* = \**sp̥rdh-*, cp. partic. *sp̥rdh-ānā-s*. 3<sup>rd</sup> sing. (aor.) *bhraś-a-t* 'fell' beside pres. *bhrāś-a-tē*. *viś-ā-tē* 'enters', Avest. *vis-aitē*. Skr. *á-sic-a-t* 'he poured out': O.H.G. *sīg-u* 'I fall down, trickle' pr. Germ. \**sīkō*, √ *seiq-*. Partic. *diś-ā-māna-s*, √ *deik-*: cp. O.Icel. *tega* 'to show' (beside *tja* = Goth. *teihan*, II A). *bhuj-ā-ti* 'bends, pushes away', Avest. *būj-a-p* 'pushed away': Gr. *ἔφυγον* 'I fled' inf. *φυγ-εῖν*, A.S. *būz-e* 'I bow', √ *bheug-* *bheug-*. Skr. 2<sup>nd</sup> sing. *druh-a-s*, Avest. *dru-žaiti*, √ *dhreygh-* 'deceive, lie'. Skr. *gūh-a-ti* 'hides' (for accent see § 525) 2<sup>nd</sup> sing. *guh-a-s*, Avest. mid. *ā-guz-ē*. From √ *dō-* 'give' Skr. *āda-t* (*a* + *a-d-a-t*), Avest. 2<sup>nd</sup> sing. opt. *dōi-š*: Lat. *red-dō*, see § 493 pp. 53 f. From √ *stā-* 'stand' Skr. *āstha-t* Avest. *a-xšt-a-p*, see § 493 p. 54. Skr. *-h-a-ti* in *ujha-ti* 'lets go' for \**ud* + *jhati*, beside *jā-hā-ti* 'leaves'.

§ 525. Many forms of this class have in Sanskrit the accent of II A; as *dāś-a-ti* √ *deñk-*, *gīr-āmi* beside *gīr-āmi* (§ 523 p. 86), *bhūv-a-t* (p. 86), *kṛp-a-tē* 'laments'. Compare § 516, page 82.

Remark. After what has been said in I § 313 p. 251 and other places, it must seem doubtful whether such a word as Skr. *pāc-a-ti* 'coquit' represents original \**pēq-e-ti* (II A), or orig. \**peq-é-ti* (II B) with weak grade stem and secondary accent, the word accent having been afterwards retracted. I hold that Bartholomae is right in allowing only *e* as the weak grade with secondary accent for roots of the form *peq-* (Bezz. Beitr., xvii 109 ff.), which brings presents like *pāc-a-ti* under II A. Bartholomae, page 117, conjectures that an Ar. \**sid-d* = \**səd-ō-* from √ *sed-* 'sit' is contained in Avest. *hiđ-a-iti*.

§ 526. Armenian. *mal-em* 'I crush, shatter' √ *mel-*: Lat. *mol-ō* etc., see § 523 p. 86. *barj-i* 'I raised' (pres. *barnam* for \**barj-na-m*): Skr. *bṛh-a-ti* 'strengthens, lifts up', √ *bhergh-*. *e-git* 'he found' (pres. *gt-anem*): Skr. *á-vid-a-t* etc., see § 523 p. 87. *e-liḱ* 'he left' (pres. *lḱ-anem*): Gr. *ἔλιπον* inf. *λιν-εῖν*, √ *leiḱ-*. *e-tuk* 'he spewed' (pres. *tḱ-anem*).

§ 527. Greek. Here the original distinction of accent between II *A* and II *B* is seen in the infinitive, but hardly anywhere else; e. g. *λείπ-ειν* : *λιπ-εῖν* (cp. I § 676 Rem. 1 p. 541). But in Greek this distinction was seized upon and connected with the distinction between present and aorist; so much so, that when verbs of II *A* were used as aorists, or verbs of II *B* for the present, their accent was changed; thus we have *γεν-ί-σθαι*, not \**γέν-ε-σθαι* (see § 518 p. 83), and *γράφ-ε-σθαι* *γλύφ-ε-σθαι* instead of \**γραφ-έ-σθαι* and \**γλυφ-έ-σθαι* (cp. § 775 Rem.). In the finite verb, the original accent of II *B* remained in a few imperatives like *ἰθ-έ*, see § 958. It is difficult to judge whether the old accent remains in words whose root has ceased to form a separate syllable, as 3<sup>rd</sup> sing. *σχ-έ-το* conj. *σχ-ῶ* from *√ seǵh-*, because the accent must rest on this syllable in any case (cp. I § 676 Rem. 1 p. 543).

Remark 1. The same cause which changed \**γραφῶν γραφεῖν* to *γραφῶν* and *γράφειν*, acted upon all other classes of thematic stems where the thematic vowel originally carried the accent, causing a change of accent whenever these stems were used as imperfect-presents. Thus we have *δάκνων* instead of \**δακ-νών* cp. Skr. *gṛ-ñd-ta* (§ 611), *τινῶν* instead of \**τιν-ών* cp. Skr. *ṛ-ñd-ti* (§ 652), *ἰσκων* instead of \**ισκῶν* \**φικ-σκῶν* cp. Skr. *ṛ-chā-ti* (§ 673), *βαίνων* instead of \**βαινῶν* \**βαν-κῶν* cp. Skr. *-gam-yā-tē* (§ 713), *ἄττων* instead of \**ἄττων* \**φαι-φικ-κῶν* cp. Skr. *vē-vij-yā-tē* (§ 730), *λαίνων* instead of \**λ(σ)-αν-κῶν* cp. Skr. *iṣ-an-yā-ti* (§ 743). This applies to all denominative verbs (Class XXXI), as *ὄραων ὀρεῖν φιλεῖν* *φιλῶν*<sup>1)</sup> *κοιῶν φθύνων ὀνομασίων ἀγγέλλων* instead of \**ὄραων* \**φιλεῶν* etc., compare Skr. *pṛtanā-yā-ti vāsna-yāti arāti-yā-ti gātu-yā-ti vṛṣan-yā-ti adhvā-yā-ti*. For these denominatives another fact has to be taken into account. In protoethnic Greek, verbs in *-τω* like *φιλέω* had become indistinguishable from verbs of Class XXXII, in *-εῖω*, as *φορέω* = Skr. *bhārāyāmi* (§ 801); and even before the accent was seized upon to help in distinguishing aorist from present, \**φιλεῶν* may have become *φιλεῖων* by analogy of *φορέων*, and then the verbal nouns of other denominative classes may have been drawn into the same circle of attraction.

*ἔ-πταρ-ο-ν* 'I sneezed' *πταρ-εῖν* from *√ pster-*. *ἔ-βαλ-ο-ν* 'I threw' *βαλ-εῖν* from *√ gel-*. *ἔ-πλ-ε ἔ-πλ-ε-το* 'versabatur' from

1) Observe that the circumflex of these contracted nom. sing. masc. forms, *ὄρεῖν φιλῶν*, supports the theory of a change of accent here set forth. The old accentuation of the thematic vowel would have produced \**ὄρον* \**φιλῶν* like *ἑταῖ;* for *ἑταῖω;*.

✓*qel-*. ἔ-ταμ-ο-ν 'I cut' ταμ-εῖν from ✓*tem-*. ἔ-θαν-ο-ν 'I died' θαν-εῖν instead of \*φαν-, beside ἔ-θeno-ν from ✓*ghen-* (I § 429 Rem. 1 p. 317): Russ. *žnu* 'I cut off' for \**gñ-a*, see § 534. ἔ-κταν-ο-ν 'I killed' κταν-εῖν from κτεν-, beside 1<sup>st</sup> pl. ἔ-κτα-μεν Class I § 502 p. 64. ἀν-οίγω 'I open' for \*ὀ-φιγ-ω, cp. Hom. ὠ-ίγ-νυ-ντο and Lesb. inf. ὀ-είγ-ην (§ 643). ἔ-πι-ο-ν 'I drank' πι-εῖν beside πῖ-θι Class I; κλύ-ω 'I hear' beside κλῦ-θι Class I, § 498 p. 59 (cp. W. Schulze, Kuhn's Zeitschr. xxix 240); it is not certain, I freely admit, that these stems in -ι-ο- and -ν-ο- are rightly classed here; see the Remark. βραχ-εῖν· συνιέναι ('grasp') Hesych.: Skr. *mṛś-ā-ti* 'touches, grasps'. γράφ-ω 'I scratch in, incise, write', ✓*gerph-* (A.S. *ceorfan* 'cut, carve' Mid.H.G. *kerben* to notch, indent *kerve* 'a notch'). Dor. τραπ-ω 'I turn' (Att. τρέπ-ω II A), Att. ἔ-τραπ-ο-ν τραπ-εῖν. ξάφω 'I dry up, wither', beside Lith. *skreb-iù* 'I grow dry'. ἔ-λακ-ο-ν 'sounded, cried, spoke' λακ-εῖν: Lat. *loqu-or* (cp. Bartholomae, Bezz. Beitr. xvii 121). ἔ-παθ-ο-ν 'I experienced' παθ-εῖν, beside πένθ-ος. ἐ-πίθ-ε-το 'he obeyed, listened to' πιθ-έ-σθαι, ✓*bheidh-*; on Goth. *us-bida* (Romans 9. 3), see § 722. ἰκ-έ-σθαι 'to arrive' beside pres. ἵκ-ω. ἔ-στιχ-ο-ν 'I climbed, went' στιχ-εῖν, ✓*steigh-*. γλύφ-ω 'I dig in, engrave, incise': A.S. *clūf-e* 'I cleave, split' (O.H.G. *chliub-u*, II A); on Lat. *glūb-ō* see § 529. ἐ-πύθ-ε-το 'he learnt' πυθ-έ-σθαι: Skr. 3<sup>rd</sup> pl. *budh-ā-nta*, ✓*bheidh-* (§ 513 p. 79). ἦλυθ-ο-ν aor. 'I came' beside fut. ἐλεύσομαι. κρύθ-ε 'he hid' beside κεύθ-ω. ἔ-σχ-ο-ν 'he held, had' σχ-εῖν, beside ἔχ-ω, ✓*segh-*. ἔ-πτε-ε-το 'he flew' πτε-έ-σθαι beside πέτε-ε-ται. Partic. μαικ-ών 'bleating, crying' beside μῆκάομαι.

With the secondary ending of the 2<sup>nd</sup> sing. middle: ἰ-σχ-ε-ῖς beside ἰ-σχ-ε-το; ἐρρέθης εἰρέθης i. e. \**e-ur-e-thēs* from ✓*uer-* 'say' (εἶρω), see § 589. Whether these very forms were some of the original types which produced the whole series of aorists in -θην, is of course doubtful; -*thēs* seems originally to have belonged only to non-thematic stems (§ 1047. 2).

Remark 2. It is hard to classify forms in -ιω -ιο-ν and -εω -οο-ι, along with which forms in *i* and *ī* are common. There is nothing *a priori*

against assuming that these have the suffix *-iō-* (Class XXVI), and that *-i-* fell out between vowels; indeed, this must be done for forms like Lesb. *φύλω* (I § 130 p. 118). *πίομαι πίμεν* beside *πίομαι πίον* may be illustrated by Skr. *pī-yá-tē, śvā* beside *śvā* by Skr. *dhū-yá-tē, lūw* beside *lūw* by O.Icel. *lǫ-ja* 'destroy, crush' (see § 707, and Osthoff, M. U. iv 12 ff.). But *i* and *ū* may come from forms of Class I, by presents passing from this class into the thematic conjugation, cp. for example *πι-έ-μεν* thematic and *πι-θ-* non-thematic, *λέω* thematic and *λῶ-το* not (also *λύ-το*, for *λέω* cp. Lat. *luō so-luō so-lvō*), *ὤ-ειν* 'I roar' (also variant *ὤρεω*, cp. Skr. *ruv-á-ti*) but Skr. opt. *rū-yā-t* (Lat. *rū-mor* Goth. *rū-na*). Then these *i-* and *ū-* forms would naturally be compared with *ῥοιτο* beside *ῥο-σθ*, *ῖ-μολο-ν* beside *ῖ-βλω*, and other such, see § 497 p. 57. Another possibility is that the long vowel came in by analogy of other tenses, *λέω* following *λῶ-σθ*, *ῥέω* following *ῥύ-σθ*, just as we see Att. *γένω* (not *\*γέω*) by analogy of *γέυ-σθ* (the Author, Gr. Gr.<sup>3</sup> p. 31), and Lesb. *ἄδικῃ* (instead of *ἄδικει*) by analogy of *ἄδικῃ-σθ* (§ 775).

§ 528. Italic. Lat. *vol-ō vol-u-nt*, *✓uel-*, see § 493 p. 51. *mol-ō*: Armen. *malem* etc., see § 523 p. 86. *tul-ō* O.Lat., *✓tel-*. *-bō*, future ending, for *\*bhū-ō*, see § 523 pp. 86 f. *lu-ō so-luō so-lvō*: cp. Gr. *λύ-ω* 'I loose' § 527 Rem. *currō* doubtless for *\*cors-ō*, cp. *ac-cersō* § 662. *nivit* (O.Lat.) for *\*nigv-i-t* (with variant *ningu-i-t*, Class XVI): Gr. *νίφ-ει* 'it snows' (also *νείφ-ει*, II A), O.Ir. *snigid* 'it drops, rains', *✓sneigh-*.<sup>1)</sup> *dī-vidō* (Umbr. vetu 'dividitō' II A, see the Author, Ber. sächs. Ges. Wiss., 1890, p. 211), beside Skr. *vidh-* 'to become empty of, to lack' pres. *vindhá-tē* Class XVI. *rudō*: Skr. *rud-á-ti*, see § 523 p. 87. *sūg-ō*: O.Ir. *sūg-im* O.H.G. *sūg-u* A.S. *sūg-e sūc-e* O.C.Sl. *sūsā* 'I suck'; we must suppose a root *seuk-* or *seuġ-*.<sup>2)</sup> Lat. Osc. *s-u-m* Lat. *s-u-mus s-u-nt*, *✓es-*, see § 523 p. 87. *co-inquō* probably for *\*in-squō*, beside *secāre*. *pac-i-t* O.Lat. (beside *pang-ō* Class XVI), *✓pak-* *pāġ-*; *tag-i-t* O.Lat. (beside *tang-ō* Class XVI), cp. *te-tigi-t* Gr. *τε-ταγ-ών* 'grasping' Class VI (§ 564).

1) Since only the 3<sup>rd</sup> sing. *nivit* occurs, there is the possibility of its being a denominative *nivire* (Thurneysen, Über die Herkunft und Bildung der lat. Verba auf *-iō*, p. 8).

2) The *✓seuġ-*, discussed by Osthoff in Paul-Braune's Beitr. VII 279 f., must be kept quite distinct.

Then again, it is probable the 3<sup>rd</sup> sing. and 1<sup>st</sup> pl. of certain Latin perfects, which were originally thematic aorists, belong to this class of forms. *tuli-t tuli-mus*, see *tulō* above. *fidi-t fidi-mus*: Skr. opt. *bhidēy-am* beside *á-bhēt* 'he split'. *scidi-t scidi-mus*: Skr. *á-chid-a-t* 'he cut off'. Compare § 867.

§ 529. In Italic it is often doubtful whether a verb belongs to II A or II B; as in the following instances. Lat. *oc-culō*, which may represent either \*-*celō* (cp. O.Ir. *cel-im* O.H.G. *hil-u* § 520 p. 84) or \*-*cllō*. *ad-venat* Osc. *kúm-bened* 'convēnit', see § 523 p. 86. Lat. *glūb-ō*, cp. O.H.G. *chliubu* and A.S. *clafe* § 527, p. 90 (cp. p. 79 footnote 1, on *īcō rūdō*). This doubt is most common with verbs in -*uō*, because -*uō* in unaccented position may come from \*-*ouō* (\*-*euō*) or from \*-*ayō* (I § 172.1 p. 152). Thus *clu-ō* 'I am called, pass for' (Gr. *κλύω* and *κλέι(φ)ομαι*), '*ru-ō* 'I snatch, tear, carry off, root up' (Gr. *ῥύω* 'pull, draw' O.C.Sl. *rŭv-e-tŭ* 'evellit' and Skr. *rāv-a-ti* 'he dashes to pieces'), '*nu-ō* (Skr. *nāv-a-tē* 'moves'), '*clu-ō* 'I purify' (Skr. *śruv-a-ti* 'melts'), *in-gruō* (Litt. *griūvū* 'I break down' § 535), *plu-i-t* (cp. *plovē-bat* § 514 p. 80). Lastly, some verbs may belong to the *īō*-class, as *suō* cp. Goth. *siu-ja* etc. § 707.

§ 530. The quality of the thematic vowel should be observed in the 1<sup>st</sup> pl. *sumus sīmus* (*possumus possīmus*), *volumus volīmus*, *quaesumus* as contrasted with *ferīmus* etc. In these *u* and *i* are used to represent a sound between the two (as in *māgnuficus māgnificus*, *maxumus maximus*), which was here the regular descendant of Idg. -*o-* (cp. Gr. *γίγ-ο-μεν*). The assumption that -*i-* in *leg-i-mus* is due to the analogy of *leg-i-tis*, and replaced *u i*, is not supported by *ferimus* beside *fertis* as compared with *volumus* : *vultis*. *sumus* must in time have got a distinct *u* (by analogy of *sum* and *sunt*, where *u* is regular for *o* in a closed syllable); for the Romance languages show sometimes a form which must come from *sumus* (Span. Port. *somos* etc.), sometimes one which must come from *sīmus* (Roumanian *semū* etc.). On the whole subject see L. Havet, *Mém. Soc. Ling.* vi 26 f.

§ 531. Keltic. Compare the general remarks in the beginning of § 520, on page 84; whence it follows that some of the examples here given may really belong to the *io*-class (§ 719).

O.Ir. *marim* 'I remain' (also conjugated in the *a*-class), ground-form *\*sm̥r-ō* √ *smer-*. *ad-gaur* 'convenio' *for-con-gur* 'I command', ground-form *\*grr-ō*, cp. Skr. *gtr-* 'voice'. Mod. Cymr. *malaf* 'I grind, grind to powder' √ *mel-*: Armen. *malem* etc., see § 523 p. 86).<sup>1)</sup> Mid.Ir. *blegaim* 'I milk': Skr. *m̥j-á-ti* etc., see § 523 p. 87. O.Ir. *dligim* 'I earn, have a claim', cp. Goth. *dulg-s* 'debt, guilt'. *ar-fiuch* 'I fight' for *\*uikō*, cp. O.H.G. *upar-wihit* § 532. *nigim* 'I wash' *do-fo-nug -nuch* 'I wash off', cp. Gr. *νίω* 'I wet, wash', Class XXVI, √ *neig-*. *snigi-d* 'it drops, rains': O.Lat. *nivi-t* § 528 p. 91.

§ 532. Germanic. In pr. Germanic the accent still lay upon the thematic vowel, which is proved by a number of forms like O.Icel. *veg* as contrasted with Goth. *veiha* from √ *ueig-* (§ 513 p. 79). Also the West-Germ. ending of the 2<sup>nd</sup> sing. O.H.G. *-is* A.S. *-es* as contrasted with Norse *-r* (for *-z*), and the A.S. ending of the 3<sup>rd</sup> sing. *-eð*, which point to pr. Germ. *\*-i-si* and *\*-i-þi*, are in some cases to be referred to verbs which in pr. Germ. belonged to Class II B; see § 990. 1. § 998. 1.

Goth. *skulan* O.H.G. *scolan* 'to owe', partic. Goth. *skulands* O.H.G. *scolant-i* (indic. *skal*):<sup>2)</sup> Lith. *skylù* 'fall in debt' instead of *\*skil-ù* (§ 535), √ *skel-* in Lith. *skelù* (i. e. *\*skel-jù* 'I owe something'. Goth. *vulands* 'seething, boiling', cp. O.H.G. *walm* 'heat, glow'. O.H.G. *cum-u* O.Icel. *kem kem* (inf. *koma*) 'I come': Skr. opt. *gam-é-t*, √ *gem-*, see § 523 p. 86. Goth. A.S. *munan* 'to think' (indic. *man*): Lett. *úf-minu* 'guess at, hit upon', √ *men-*.

1) For Cymric, much the same is true as for Irish (above, § 520 p. 84). Cymric does not enable us to decide whether *\*malō* or some such form as *\*maliþō* was original.

2) The latest discussion of forms with *s-* instead of *sk-*, as O.H.G. *sulen*, is by Johansson in Paul-Braune's *Beiträge* xiv 295.



Goth. *un-vunands* 'not pleased': Skr. opt. *van-ē-ma*, √ *ven-*, § 523 p. 86. O.H.G. *chiuw-a* 'I chew': O.C.Sl. *čiv-e-tū* 'chews' for \**giūv-e-tū*, groundform \**giuū-ō*. Goth. *trud-a* O.Icel. *trœð* (inf. *trœða*) 'I step, tread' as contrasted with O.H.G. *trit-u* II A. Goth. *ga-daúr-san* 'to dare' (indic. *ga-dars*): Skr. *dhṛṣ-á-nt-* 'daring', √ *dhers-*. O.H.G. *scalt-u* 'I thrust, hit' ground-form \**skl̥dh-ō* as opposed to O.H.G. *scilt-u* 'I scold' II A. Goth. *gagga* O.H.G. *gangu* 'I go' ground-form \**gh̥gh-ō*, cp. Lith. *ženg-iū* 'I stride'. Goth. *blanda* O.H.G. *blantu* 'I mix' ground-form \**bhl̥dh-ō*, cp. Goth. *blind-s* 'blind', Lith. *blendžiū-s(i)* 'I darken myself' (of the sun); O.C.Sl. *blęd-q* 'I wander' for \**bhlendh-* or \**bhl̥dh-* (§ 535). O.H.G. *upar-wihit* 'exsuperat' inf. *-wehan*, O.Icel. *veg* 'I conquer, kill' inf. *vega* (pret. *vā*, transferred to the *e*-series): O.Ir. *ar-fuch* 'I fight', √ *ueiq-*, cp. Goth. *veih-a* 'I fight' II A; the O.H.G. is a contamination of \**uiz-ō* and \**uēiz-ō*. Goth. *vitan* O.H.G. *wizzan* 'to know' partic. *vitands wizzanti*: Skr. *á-vid-a-t* etc., see § 523 p. 87; add 1<sup>st</sup> pl. injunctive A.S. *wuton* for \**witon* followed by the infinitive = 'let us . . .', cp. *witan* 'to take heed, follow a direction, prepare to start' (O.Sax. *wita* § 1029). Goth. *bi-leiba* O.H.G. *bi-lību* 'I remain': Skr. *á-lip-a-t* 'he anointed, smeared', Lith. *li-pū* 'I climb, clamber' O.C.Sl. *pri-līpū* 'adhaesi', √ *leip-*. O.Icel. *sof sef* 'I sleep' inf. *sofa*: cp. A.S. *swefan* II A, √ *suep-*. Goth. *lūk-a* O.H.G. *lūhh-u* 'I shut': Skr. *ruj-á-ti* 'breaks open, breaks to pieces'. O.H.G. *brūhh-u* A.S. *brūc-e* 'I use, enjoy': Lat. *fruor* for \**frugv-ōr*. A.S. *đūt-e* 'I utter a sound': Skr. *tud-á-ti* 'pushes'. A.S. *sōð* O.Icel. *sannr* 'true' pr. Germ. \**s-a-nþ-a-*, beside indic. \**es-ti* 'is', see § 523 p. 87. O.Icel. *tek* 'I take' inf. *taka*, cp. Goth. *tek-a* II A. O.H.G. *bahh-u* 'I bake', cp. Gr. *φάγω* 'I roast' II A. O.H.G. *wat-u* O.Icel. *veð* (inf. *vaða*) 'I wade', cp. Lat. *vad-ō* II A.<sup>1)</sup>

To this class also belongs the West Germ. 2<sup>nd</sup> sing. preterite: — O.H.G. *wurti* A.S. *wurde* 'becamest': Skr. *á-vṛt-a-s*,

1) For these and other Germanic examples I refer to Osthoff, Paul-Braune's Beitr. VIII 287 ff.; Burghauser, Idg. Präsens-Bildung im Germ. pp. 28 ff.; Bremer, Zeitschr. deutsch. Phil. XXII 495 f.

O.H.G. *mulki* 'milkedst': Skr. *á-mṛj-a-s*, O.H.G. *biggi* A.S. *bite* 'bitedst': Skr. *á-bhid-a-s*, O.H.G. *zigi* 'pullest': Skr. *á-diś-a-s*, *sigi* 'strainedst': Skr. *á-sic-a-s*, *bi-libi* 'remainedst': Skr. *á-lip-a-s*, *ruzzi* 'criedst': Skr. *á-rud-a-s*, *kuri* 'chosest': Skr. *á-juṣ-a-s*. See § 893.

§ 533. As pr. Germ. *i* may come from either *ī* or *eī* in Indo-Germanic, we cannot tell whether to place in *A* or *B* Goth. *fra-veita* 'I avenge' and O.H.G. *wīz-u* 'I punish, reprove' (1/ *ueīd-*), with not a few others.

§ 534. Balto-Slavonic. In Slavonic this class is much larger than in Baltic.

O.C.Sl. *žir-e-tū* 'devours': Skr. *gir-ā-ti*, see § 523 p. 86; similarly *tīretū* 'terit' 1/ *ter-*, *mīretū* 'dies' 1/ *mer-*, *stīretū* 'stretches' 1/ *ster-*, and others. Lith. *pil-ù* 'I shed' 1/ *pel-* 'I fill', cp. Skr. imper. *pūr-dhī* Class I. Lith. *im-ù* 'I take' O.C.Sl. *im-e-tū* 'takes', ground-form *\*ym-ō*, see § 523 p. 86. O.C.Sl. *žim-e-tū* 'presses', cp. Gr. *γίμω* 'I groan' II *A*. Lith. *gin-ù* 'I keep off, avert', Russ. *žn-e-tū* 'cuts off, reaps' for pr. Slav. *\*žin-e-tū* *\*gñn-e-tū* (I § 36 p. ): Gr. *ἐ-θαρ-ο-ν*, see § 527 p. 90. Lith. *pin-ù* 'I plait, twist', O.C.Sl. *pñn-e-tū* 'stretches, hangs', 1/ (*s*)*pen-*. O.C.Sl. *po-činetū* 'begins', 1/ *qen-*, cp. *po-konī* 'beginning'. O.C.Sl. *rūv-e-tū* 'evellit': Gr. *ἐρύω* etc., see § 529 p. 92. O.C.Sl. *živ-e-tū* 'chews' for *\*gīüv-e-tū*: O.H.G. *chiuw-u*, see § 532 p. 94. O.C.Sl. *pljiv-e-tū* 'spews' for *\*(s)pīüv-e-tū*: Lat. *spu-ō* (cp. *su-ō* § 529 p. 92); *bljiv-e-tū* 'vomits, breaks wind' for *\*bljüv-e-tū*, *kljiv-e-tū* 'pecks, picks' for *\*kljüv-e-tū*; on the Lith. *blūv-ù* *klūv-ù*, which answer to the last two, see § 535. O.C.Sl. *vriz-e-tū* 'binds, shuts', 1/ *uergh-* (Lith. *verž-iū* 'I fasten, confine'). O.C.Sl. *vrīž-e-tū* 'throws' 1<sup>st</sup> sing. *vrīg-a*, 1/ *uerg-*, Goth. *vairp-a* 'I throw' II *A*. O.C.Sl. *vrīš-e-tū* 'thrashes, threshes' 1<sup>st</sup> sing. *vrīch-a*, 1/ *uers-*, Lat. *verr-ō* II *A*. O.C.Sl. *mlūz-e-tū* 'milks': Skr. *mṛj-ā-ti* etc., see § 523 p. 87. O.C.Sl. *dlūb-e-tū* 'sculpit', 1/ *dhelbh-*, O.H.G. *bi-tilbu* 'I bury', II *A*. O.C.Sl. *řic-i* 'I say' 2<sup>nd</sup> sing. opt., ground-form *\*řq-o-ī-s*, beside indic. *reč-e-tū* 1<sup>st</sup> sing. *rek-a* II *A*, in

Czech also indic. *řku* for *\*řk-a*; by analogy of *řic-i* were formed *řic-i píc-i řiz-i* from *tek-a* 'I run' *pek-a* 'I bake' *řeg-a* 'I burn' (cp. § 686 on Lith. *gistu* instead of *gestù*). Lith. *suk-ù* Russ. *sk-u* (for *\*sük-a*) 'I turn, twist'. Lith. *pis-ù* 'coeo': Skr. *á-piš-a-t* 'trod, beat, ground',  $\sqrt{peis-}$ . Lith. *sus-ù* 'I become scabby' Lett. *sus-u* 'I become dry': Skr. *á-śuṣ-a-t* 'dried up, wore away' (I § 557. 4 p. 413). O.C.Sl. *žid-e-tŭ* 'waits' beside *žid-e-tŭ* II A, § 522 p. 85. O.C.Sl. *šup-e-tŭ* 'sheds, strews', inf. *su(p)-ti*. Lith. *plak-ù* 'I strike, whip',  $\sqrt{plaq-}$  *plag-plangere*, cp. Goth. *flōk-a* 'I bewail' II A.

§ 535. In Lithuanian, *i* and *u* in the root syllable were often lengthened. *skylù* 'I fall in debt' instead of *\*skil-ù*, compare Goth. *skulan*, see § 532 p. 93; *kylù* 'I raise myself' instead of *\*kil-ù*,  $\sqrt{gel-}$ ; *svyrù* 'I get the better' instead of *\*svir-ù*,  $\sqrt{sver-}$ . *griuvù* 'I break down' instead of *\*griuō-ù*: Lat. *in-gruō*, see § 529 p. 92; *blūvù* 'I break out into bellowing or bleating' *klūvù* 'I stick fast to anything, hang on to' beside O.C.Sl. *bljŭ-e-tŭ kljŭ-e-tŭ*, see § 534 p. 95. See Leskien, Arch. slav. Phil. v 530, and Wiedemann, Lit. Prät. 71 ff., where the pretty conjecture is offered that on the analogy of pairs of forms like pres. *gyjù* (*gy-jù*): pret. *gijaũ* (*gij-aũ*), a present *skylù* was formed for *skilaũ*, a present *griuvù* for *griuvaũ*, and so forth.

In Slavonic, it is often doubtful whether a verb belongs to A or B. This is the case with *pīj-e-tŭ* 'drinks', *bīj-e-tŭ* 'strikes', whose *-īj-* may be orig. *-iĭ-* or orig. *-eĭ-* (I § 68 p. 60); cp. Leskien as above cited, pp. 501 ff.; Skr. *páy-a-tē* supports the derivation of *pīj-e-tŭ* from *\*peĭ-e-ti* (§ 522 p. 85). The same doubt meets us in forms with *-eĭ-* in the root syllable, since this may be orig. either *-ŷ-* or *-en-*, e. g. *\*blēd-e-tŭ* 'wanders' from  $\sqrt{bhleñdh-}$  (see § 532 p. 94); cp. *lēč-e-tŭ* 'bends', § 637.

## Class III.

Reduplication ending in *-ī* or *-ā* + simple Root forming the Present Stem.

§ 536. We begin with words from roots containing *i* or *u*, which have the same vowel in the reduplication; see § 469, page 14. Next follow stems which have *i* in the reduplication, but some other vowel in the root; see § 473 pages 17 ff.

Class IV, non-thematic, bears the same relation to this as Class II to Class I (§ 491 p. 50).

§ 537. Roots with *i*- and *u*-vowels. Only in Aryan and Germanic.

Pr. Idg. *\*bhi-bhāj-mi* 'I quake, am afraid' 1<sup>st</sup> pl. *\*bhi-bhi-més* 3<sup>rd</sup> pl. *\*bhi-bhī-ṇti*: Skr. *bi-bhē-mi* 3<sup>rd</sup> dual *bi-bhi-tas* *bi-bhī-tas* 3<sup>rd</sup> pl. *bī-bhy-ati*, and O.H.G. *bi-bē-m*, which fell under the influence of verbs in which *-ēm* was a suffix, and so lost the gradation of its stem.<sup>1)</sup> Conjunctive: Skr. *bī-bhay-a-t*. Optative: Skr. *bi-bhi-yā-t*. — With thematic vowel Skr. 3<sup>rd</sup> sing. *bi-bhy-a-ti*.

Aryan. Skr. *ci-kē-mi* 'I observe, notice' 3<sup>rd</sup> sing. imper. mid. *ci-ki-tām* 2<sup>nd</sup> sing. imper. act. *ci-kī-hi*; conj. Avest. *ci-kay-a-p*. Skr. *á-dī-dhē-t* 'he looked' 1<sup>st</sup> pl. *dī-dhi-mas* mid. pres. *dī-dhy-ē* pret. *á-dī-dhī-ta*; conj. *dī-dhay-a-t*. Skr. *á-dī-dē-t* 'he appeared' 3<sup>rd</sup> pl. *dī-dy-ati* imper. *dī-dī-hī* *dī-dī-hī*; conj. *dī-day-a-t*; — with thematic vowel Gr. *δī-ζο-μαι* 'I seek, strive' (orig. 'look out for something') for *\*δī-δζο-μαι* (see § 469 p. 14, § 549). Skr. *dī-* and *dhī-* both became *dī-* in Avestic ep. Avest. *dadāiti* = Skr. *dādhati* and *dādati*, § 540): *dī-ḍaṇiti*; — with thematic vowel imper. *dī-ḍy-a*, cp. conj. *dī-ḍy-a-p*. Skr. *vi-vēṣ-ṭi* 'works' 1<sup>st</sup> pl. *vi-viṣ-mas*, conj. 2<sup>nd</sup> sing. *vi-vēṣ-a-s*. *iy-ē-ti* 'goes' only found in the 2<sup>nd</sup> sing. pret. *āiy-ē-ṣ*, Avest. 3<sup>rd</sup> pl. conj. *yeyan* = Ar. *\*ī-ai-ā-n* (§ 473 p. 19).

1) Cp. § 465 p. 12, § 469 p. 14, § 739 on O.H.G. *rērēm* and Goth. *reira*.

Skr. *ju-hō-mi* 'I offer, sacrifice' 1<sup>st</sup> pl. *ju-hu-más* 3<sup>rd</sup> pl. *jú-hv-ati*, conj. 2<sup>nd</sup> pl. *ju-hav-a-tha*, opt. 1<sup>st</sup> pl. *ju-hu-yā-ma*. 1<sup>st</sup> pl. *ju-hā-mási* from *hā-* 'call'. 3<sup>rd</sup> pl. *sú-ṣv-ati* from *su-* 'press'.

Sometimes a strong stem has got into the place of the weak (cp. § 499 p. 62), as Avest. 2<sup>nd</sup> sing. mid. *ji-yaē-ša* from *ji-* 'live', Skr. 2<sup>nd</sup> pl. *ju-hō-ta* from *hu-* 'offer, sacrifice', 2<sup>nd</sup> sing. *yu-yō-dhi* 2<sup>nd</sup> dual *yu-yō-tam* from *yu-* 'keep off'.

Remark. *k* in Skr. *ci-kē-mi* (✓*gei-*), and *γ* in Avest. *ji-yaē-ša* (✓*gei-*) are taken from the perfect, where they were regular before *o* in the sing. indic. active (I § 445 ff. pp. 331 ff.). In considering *ji-ghar-ti* (§ 540), if its root belonged to the *e*-series, we must remember that one of the stems of this verb is *jighr-*, and *gh* was regular there; so with *jā-gar-ti* from ✓*ger-* we must remember the stem *jā-gr-* (§ 560).

#### § 538. Roots with other Vowels.

In Aryan, roots with a long *a*-vowel have generally in the reduplication *a* = Idg. *e* instead of *i*, when the weak stem in the root syllable had not *i*. Examples: Skr. *dā-da-ti* mid. *dā-t-tē* from ✓*dō-* 'give', *jā-ha-ti* pl. *ja-hi-mas* from Ar. *zhā-* 'leave, give up'. But on the contrary *śi-śa-ti* imper. *śi-śī-hi* mid. *śi-śī-tē* from ✓*kō-* 'whet, sharpen'. In the latter word we see the Idg. root-determinative *i*, which so often forced its way into the place of Ar. *i* = Idg. *ə* (see § 498 pp. 61 f.); and this *i* is regularly echoed by *i* in the reduplicator; compare *śi-śī-hi* with *dī-dī-hi* from *dī-* 'appear'. Skr. *ja-hī-tam* beside regular *ja-hi-tam* (see Whitney, Sanskrit Roots, p. 204) has been altered by the influence of the mid. *jit-hi-tē* (§ 540), similarly *ra-rī-dhvam* by that of *ri-rī-hi* (*rā-* 'give').

So too the ✓*dhē-* 'place' in Balto-Slavonic reduplicates with *e*, as Lith. 2<sup>nd</sup> pl. *dē-ste* like O.H.G. *da-tthá*.

These forms with *e* belong to Class V, not like Gr. *δί-δωμι* *τί-θημι* etc. It seems to me impossible to decide whether in Idg. the same present stem had both *i* and *e* in its reduplicated forms, as *\*dhi-dhē-ti* and *\*dhe-dhē-ti*, or whether *e* only came in by analogy of Class V, and is of later date than the parent language. If the latter, then the influence of perfects with *e* in the reduplicator must be taken into account (§ 555).

Compare Gr. ἔλαθι = \*σι-σλα-θι and Lesb. ἔλλαθι = \*σε-σλα-θι § 542.

Under these circumstances, I cite Aryan and Balto-Slavonic forms both in Class III and Class V.

§ 539. Pr. Idg. \**bhi-bher-mi* 'I bear' 1<sup>st</sup> pl. \**bhi-bhṛ-més* 3<sup>rd</sup> pl. \**bhi-bhṛ-ṇti*: Skr. *bī-bhar-mi* 2<sup>nd</sup> dual *bī-bhṛ-thās* 3<sup>rd</sup> pl. *bī-bhṛ-ati*, Gr. 1<sup>st</sup> pl. \**πί-φρα-μεν* inferred from inf. *ἐσ-πιφράναι*. Conjunctive: Skr. *bī-bhar-a-t*. Optative: Skr. *bī-bhṛ-ya-t* (cp. *ca-kr-iyā-t*). — With thematic vowel Skr. partic. mid. *bī-bhṛ-a-māṇa-s* 3<sup>rd</sup> pl. imperf. *á-bi-bhṛ-a-n*.

\**pi-pel-mi* 'I fill': Skr. *pī-par-mi* *pi-pr-más*, Gr. *-πί-πλα-μεν* (on the singular *-πί-πλη-μι*, see § 542). — With thematic vowel Skr. 3<sup>rd</sup> sing. mid. *á-pi-pr-a-ta*.

\**ni-nes-mi* from  $\sqrt{\text{nes}}$  'go towards' (Gr. *νέ-ο-μαι* Skr. *nás-ā-tē*): Skr. 3<sup>rd</sup> pl. mid. *nīś-atē* 'they touch their bodies, kiss' partic. *nīś-āna-s*. — Gr. *νίσομαι* 'I go back, return' for \**νι-νσ-ο-μαι* (the Author, Gr. Gr.<sup>2</sup> § 45.5 p. 61) contains a stem \**νι-νσ-* or \**νι-νσ-ο-* (see § 733).

\**dhi-dhē-mi* 'I place' 1<sup>st</sup> pl. \**dhi-dh-més* and doubtless \**dhi-dhā-més*<sup>1)</sup> 3<sup>rd</sup> pl. \**dhi-dh-ṇti*: Skr. *dā-dhā-mi* *da-dh-más* (cp. 2<sup>nd</sup> pl. mid. *da-dhi-dhōē*) *dā-dh-ati*, Gr. *τί-θῃ-μι* *τί-θε-μεν*, O.H.G. *te-ta* O.Sax. *de-da* perhaps for \**dhi-dhē-* (§§ 545, 886), Lith. 2<sup>nd</sup> pl. *dēste* i. e. \**de-d+te*. Optative: Skr. *da-dh-yā-t*. — With thematic vowel Skr. *dā-dh-a-ti* Lith. *de-d-ù*.

\**si-sē-mi* 'I send forth, let go, throw, sow' 1<sup>st</sup> pl. \**si-s-més* and doubtless \**si-sā-més*: Gr. *ῖ-η-μι* *ῖ-ε-μεν* (Lat. *serimus* for \**si-sa-mos*? § 543). — With thematic vowel Lat. *serō* for \**si-s-ō*.

\**di-dō-mi* 'I give' 1<sup>st</sup> pl. \**di-d-més* and doubtless \**di-dā-més*, 3<sup>rd</sup> pl. \**di-d-ṇti*: Skr. *dā-dā-mi* *da-d-más* *dā-d-ati*, Gr. *δί-δω-μι* *δί-δο-μεν*, 2<sup>nd</sup> pl. Lith. *dūste* and O.C.Sl. *daste* instead of \**deste* (§ 546). Optative: Skr. *da-d-yā-t*. — With thematic

1) This form may be due to the analogy of *dhā-mé(m)*, cp. *ῖ-θε-μεν*. But it does not follow, as some have said, that the form cannot be original.

vowel Skr. *dā-d-a-ti* Sabell. (Vest.) *di-d-e-t* 'dat', cp. Lith. Lett. *dādu* and O.C.Sl. partic. *dady* gen. *dadašta* § 546.

\**si-stā-mi* 'I place, sisto': Gr. ἵστανμι ἵσταμεν, O.H.G. *se-stō-m*. Skr. 1<sup>st</sup> sing. *tī-ṣṭhāmi* may be added, and perhaps Lat. *sistimus* (§ 543). — With thematic vowel Skr. *tī-ṣṭh-a-ti* Lat. *si-st-ō* Umbr. *se-st-u*.

Idg. \**pi-pō-mi* 'I drink' is implied by such forms as Skr. mid. 3<sup>rd</sup> pl. *pi-p-atē* partic. *pi-p-and-s*; to this may be referred Falisc. *pipafo* 'bibam' (§ 594 Rem.). With thematic vowel Skr. *pi-b-a-ti* Lat. *bibō* instead of \**pi-b-ō* O.Ir. 3<sup>rd</sup> sing. *ibid* for \**pi-b-e-ti*, although the *-b-* of these words is certainly obscure (cp. I § 325 p. 263). Perhaps the 2<sup>nd</sup> sing. imper. \**pi-b-dhi* and 2<sup>nd</sup> pl. mid. \**pi-b-dhy-*, forms which must have had a place among the original non-thematic persons, caused some confusion in the sound.<sup>1)</sup> In these *-b-* was regular, because *-p-* had been assimilated to the following voiced sound. On the same principle we have explained the variants \**dekṃt-* (Skr. *daśat-*) and *dekṃd-* (Gr. δεινάδ-), as being due to cases which had a *bh*-suffix, such as the instr. pl. \**dekṃd-bhi(s)* (II § 123 p. 392). Then *p* must have levelled out *b* in the non-thematic conjugation (Skr. *pi-p-atē*), because this was closely associated with \**pō-ti* (Skr. *pā-ti*), and was especially exposed to the influence of the reduplicated perfect (Skr. *pa-p-ē* Gr. πέπομαι). Similarly, Gr. πόσσω 'I feed, tend' may be connected with Skr. *pā-ti* 'tends' through the imperative \**b-dhi*.

§ 540. Aryan. Skr. *jī-ghar-ti* 'smells' 3<sup>rd</sup> pl. *jī-ghr-ati*; with thematic vowel *jī-ghr-a-ti*: on *gh*, see § 537 Rem. p. 98. Skr. *tī-tar-ti* 'gets over', partic. *tī-tr-at-*. Skr. *i-y-ar-ti*, for its reduplication see § 473 p. 19. Skr. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *dī-dhar* 2<sup>nd</sup> pl. *dī-dhy-tā* from *dhar-* 'hold fast'. Skr. imper. *pi-prg-dhi* from *parc-* 'to mix'.

1) There is no reason that I know of why we should suppose that our prehistoric ancestors had this imperative very often on their lips. But be it remembered that from the one imperative form *dāhi* 'give' in Pali, the whole of the present tense, *dēmi dēsi* etc., has sprung into existence (E. Kuhn, Beitr. zur Pali-Gramm., 98).

Skr. *śi-ṣak-ti* Avest. *hi-ṣax-ti*, √*seq-* 'accompany' (cp. Skr. 2<sup>nd</sup> pl. *sá-śc-ati*, Class V, § 555). Skr. *vī-vak-ti* from √*ueq-* 'speak'. Avest. 2<sup>nd</sup> pl. injunct. *nista* = \**nīsta* i. e. \**ni-nd+ta* from *nad-* 'roar, abuse'; — with thematic vowel Skr. 3<sup>rd</sup> sing. *nī-nd-a-ti* § 550. Avest. 3<sup>rd</sup> sing. injunct. *di-das* from *das-* 'consecrate, offer up'.

Roots in Ar. -*ā* reduplicate with *i* in Sanskrit when the weak forms have *i* as root-determinative (§ 538 p. 98). √*mē-* 'measure' mid. 3<sup>rd</sup> sing. *mī-mī-tē* 3<sup>rd</sup> pl. *mī-m-atē*; — with thematic vowel opt. *mī-m-ē-t*. √*kō-* 'sharpen, whet' *śi-ṣā-ti* imper. *śi-ṣi-hi*; — with thematic vowel 3<sup>rd</sup> pl. *śi-ṣ-a-nti*. *jī-hi-tē* 'yields, departs' 3<sup>rd</sup> pl. *jī-h-atē* beside act. *jā-ha-ti* *ja-hi-mas* (*ja-hi-tam* and other forms have *i* by analogy of the middle, see § 538 p. 98).

√*dhē-* 'place' and √*dō-* 'give' (almost indistinguishable in Iranian, because of the change of *dh* to *d*, I § 481 p. 355): Skr. *dā-dha-ti* *dā-dā-ti* Avest. *da-dā-iti* O.Pers. pret. *a-da-dā*. 1<sup>st</sup> pl. Skr. *da-dh-mās* *da-d-mās* Avest. *da-d-mahi*, in the Gathas *da-d-mahī*; mid. 3<sup>rd</sup> sing. Skr. *dhattē* Avest. *dazdē* from *dhē-* (I § 482 Rem. 1 p. 356), Skr. *dattē* Avest. *dastē* from *dō-*. Imperative: Skr. *dhēhi* for pr. Ar. \**dha-z-dhi* from *dhē-*, and *dēhi* for pr. Ar. \**da-z-dhi* from *dō-*, Avest. *da-z-di*; Skr. has also the re-formate *daddhi* instead of *dhēhi* and of *dēhi* both (I § 476 p. 351, § 482 Rem. 1. p. 356). In Skr. we also find *da-dhi-* (cp. Gr. *τι-θη-*), e. g. *da-dhi-dhvē* *da-dhi-ṣvā* beside *dha-d-dhvē* *dha-t-sva*. 3<sup>rd</sup> pl. Skr. *dā-dh-ati* *dā-dh-atē* *dā-d-ati* *dā-d-atē* (Avest. *da-p-enti* *da-d-entē*, cp. § 500 p. 63, § 1018. 1. b). Optative: Skr. *da-dh-yā-t* *da-d-yā-t* Avest. Gath. *daidyā-p*. — With thematic vowel *dā-dh-a-ti* *dā-dh-a-tē* *dā-d-a-ti* *dā-d-a-tē*, Avest. *da-p-a-iti* *da-p-a-itē*, which forms are also conjunctive (§§ 931 f.)

#### § 541. Confusion of Strong and Weak Stem.

Strong instead of Weak: Skr. 2<sup>nd</sup> pl. *īy-ar-ta*, imper. *śi-ṣā-dhi*, 2<sup>nd</sup> pl. *dā-dha-ta* *ā-da-dha-ta* *dā-dā-ta* *ā-da-dā-ta*.

Weak instead of Strong: Skr. Ep. *da-d-mi* Avest. 3<sup>rd</sup> sing. *dazdī* (√*dhē-*) and *dasti*. These forms are due to the analogy



of *ád-mi át-ti* and the like, the reduplication having been lost sight of in the (pr. Ar.) forms *\*dhadh-mas(i) \*dad-mas(i)* opt. *\*dhadh-yā- \*dad-yā-* conj. *\*dhadh-a- \*dad-a-*, which were conceived to be simple roots (cp. the end of § 540). This also produced the forms Skr. pass. *dad-yá-tē* partic. *dat-tá-s* from  $\sqrt{dō}$ , and Avest. inf. *dastē* from  $\sqrt{dō}$ - and inf. *dazdē* from  $\sqrt{dhē}$ - (cp. Bartholomae, Ar. Forsch. III 48).

§ 542. Greek. From roots ending in *-r* and *-l* we have only the weak stem, the strong forms following Class XI. Thus *-πίπλα-μεν* 'we fill' *-πίπλα-ται*: Skr. *pi-pṛ-más*; *\*πίφρα-μεν* 'we bring': Skr. *bi-bhṛ-más* (§ 539, p. 99). But *-πίπλη-μι* instead of *\*πι-πελ-μι* from the stem *\*pl-ē-*, cp. unreduplicated Skr. *prā-si á-prā-t* Gr. *πλή-το* Lat. *im-plē-tur*. *-πίπρω-μεν* 'we kindle', sing. *-πίπρω-μι*,  $\sqrt{per-}$  (Mod. Slov. *perēti* 'moulder' O.C.Sl. *para* 'steam'). The nasal in *πίμ-πλαμεν* *πίμ-πρωμεν* comes from *πιμπλάνω*, see § 621. *ἔλαθι* 'be gracious' *ἔλατε* *ἔλαμαι* for *\*σι-σλα-* (I § 565 p. 422),  $\sqrt{sel-}$ , cp. Lesb. *ἔλλα-θι* for *\*σε-σλα-θι*, Class V.

*τί-θη-μι* 'I place' *τί-θε-μεν* *τί-θε-ται*, *ἵ-η-μι* 'I send forth' for *\*σι-ση-μι ἵ-ε-μεν ἵ-ε-ται*, *δί-δω-μι* 'I give' *δί-δο-μεν* *δί-δο-ται*, *ἵ-στη-μι* 'I place' *ἵ-στα-μεν ἵ-στα-ται*, see § 539 p. 100. Hom. 3<sup>rd</sup> sing. *δί-δῃ* imper. 3<sup>rd</sup> sing. *δι-δέ-ντων* from  $\sqrt{dē}$ - 'bind'. In the stems *τι-θε-* *ι-ε-* *δι-δε-* *δι-δο-*, *ε* and *ο* have taken the place of a previous *α* = Idg. *ə*, as in *ἔ-θε-μεν ἔ-δο-μεν* § 493 p. 53, and in *τέ-θε-ται δέ-δο-ται* § 856: cp. Skr. *da-dhi-dhvé ja-hi-mas*. The loss of forms without *ə*, answering to the Skr. *da-dh-más* etc., is a consequence of the different forms which some of the persons of this tense assumed in due course; we should have by rule *\*τιθμεν \*θιστε*; *\*διδμεν \*διστε*, *\*ίμεν \*ίστε*. 3<sup>rd</sup> pl. Dor. *τίθεντι δίδοντι* instead of *\*τι-θ-ατι \*δι-δ-ατι*, see § 1020. Sometimes the strong stem prevails, or words follow the analogy of Classes X and XI: Hom. partic. *τι-θή-μενος* instead of *τι-θέ-μενος*, imper. *δί-δω-θι* (like Pali *da-da-hi*). On the analogy of verbs in *-τω -ω -αω*: pres. *τιθεῖ δίδωῖ*, imperf. *ἐτίθει ἔει ἐδίδου*, imper. *τίθει δίδου ἴστα*, inf. *τιθεῖν συν-αῖν*, partic. Delph. *διδέουσαι*; and then again *ἐτίθεις -ει* and

*ἔεις* -ει produced the 1<sup>st</sup> sing. *ἔτιθεν* and *ἔειν* after the model of *ἦειν* 'I went' as compared with *ἦεις ἦει*.

As regards *νίσσμαι* beside Skr. 3<sup>rd</sup> pl. *nīś-atē*, see § 539 p. 99, § 733.

§ 543. Italic. There are no forms at all which can be certainly placed in this class. The conjugation was thematic, that of Class IV; as 1<sup>st</sup> sing. Lat. *si-st-ō* Umbr. *se-st-u*. However, as we must regard *red-dimus red-ditis*, notwithstanding *reddunt*, as descended from *\*red-dāmus \*red-dātis* (§ 505, p. 71), so we may regard *serimus seritis, sistimus sistitis* as derived regularly from *\*si-sā-mos \*si-sā-tes* (Gr. *ἴ-ε-μεν -τε*), *\*si-stā-mos -tes* (Gr. *ἴ-στα-μεν -τε*).

§ 544. Keltic. The thematic type is seen in O.Ir. *i-b-i-d* (§ 554), and the extension with *-io-* in *-airissiur* (§ 733).

*a*-conjunctives are the future Mid. Ir. *gignid* 'nascetur' for *\*gi-gen-ā-ti*, O.Ir. *fo-didmae* 'patieris' 3<sup>rd</sup> pl. *fo-didmat* (from pres. *fo-daim* 'patitur'), see Thurneysen, Kuhn's Zeitschr. xxxi 77 ff. They have the look of conjunctives belonging to thematic Class IV A. But probably the conjunctive vowel *a* had here taken the place of older *-o-* *-e-* (by association with the unreduplicated conj. imperf., *-genad*, and the reduplicated conjunctive of Class IV B or Class VI, *bēra*); then the forms will originally have been like Skr. *bi-bhar-a-t*, and *gignid* must be closely connected with Avest. *zī-zan-a-ḥ zī-zan-a-nti* Skr. *ā-jī-jan-a-t* (§ 548).

§ 545. Germanic. O.H.G. *se-stō-m* 'sisto, I arrange, design', *√sta-*, with gradation lost, see § 539 p. 100. Whether O.H.G. *te-ta* O.Sax. *de-da* 'did' is an imperf. like Gr. *τι-θεν* or an old perfect, remains doubtful; see § 886.

§ 546. Balto-Slavonic. A few relics are the presents of *√dhē-* 'set, place' and *dō-* 'give', but with *e* in the reduplicator (§ 538 p. 98).

In pr. Balto-Slavonic the forms were *\*dhe-dh-mi* and *de-d-mi*, which may be compared with Skr. *da-d-mi* and Avest. *dazdī dasti* (§ 541 pp. 101 f.). But they did not, as these did, arise only by the weak stem spreading into the singular, but from

this and another cause together; the other cause was, that the 2<sup>nd</sup> sing. middle, which originally had the weak stem, had got an active meaning (see § 991 on Lith. *desē-s dāsi* O.C.Sl. *dasi*). And since *\*dhe-dh-mi* became *\*dedmi* in pr. Balto-Slav. (I § 549 p. 402), the two verbs were confused in the present, and the same forms served for both (cp. Avest. *dađaiti* = Skr. *dādhati* and *dādati*, § 540 p. 101).

However, it was only in the meaning of 'I lay' that *\*dedmi* survived for any time. Lith. sing. 1<sup>st</sup> pers. *dēmi* for *\*dedmi*, 2<sup>nd</sup> reflex. *desē-s* for *\*de-t-sē-s*, 3<sup>rd</sup> *dēsti dēst*, 2<sup>nd</sup> pl. *dēste*. Now the verb is mostly thematic, *de-d-ū dedī dēda* etc. And *dēmi* 3<sup>rd</sup> sing. *dēsti* too took *ē* from non-present forms *dējau dēsiau* and the like, just as Gr. Lesb. *ἀδινῶ* instead of *ἀδινέω* follows *ἀδινῆ-σω*, and *γεύω* instead of *\*γέω* follows *γεύσω* etc. (§ 775). But in Slavonic we have *deždetŭ* = *\*de-d-je-tŭ*, following the *jo*-class (§ 733).

In the meaning 'I give', *\*dedmi* was changed to *\*dōdmi* in pr. Balto-Slavonic by analogy of non-present forms with *\*dō-*. There is a reason why the vowel of the root got into *\*dedmi* 'I give' and not into *\*dedmi* 'pono'. It is that the difference between the vowel of the first syllable of the present and that of the other tenses was in *\*dedmi* 'pono' only one of quantity, but in the other it was a difference of quality also; *\*dedmi*: aor. *\*dē-s-* was backed up by such verbs as *\*tekō*: aor. *\*tēk-s-* (O.C.Sl. *teką tēchŭ*), but there was no parallel for *\*dedmi*: aor. *\*dō-s-*. Lith. sing. 1<sup>st</sup> pers. *dŭmi*, 2<sup>nd</sup> *dāsi* for *\*dū-t-si*, 3<sup>rd</sup> *dŭsti dŭst*, pl. 1<sup>st</sup> *dŭme*, 2<sup>nd</sup> *dŭste*; *dŭmi dŭme* for *\*dūdmi \*dūdme*. Now generally thematic, *dŭdu* etc. (also Lett. *dūdu*). O.C.Sl. *damŭ dasi dastŭ damŭ daste dadętŭ*; *damŭ damŭ* have *-m-* for *-dm-*. Partic. thematic *dady* (*da-dašta*) like Lith. *dŭ'dās*. As regards 1<sup>st</sup> dual Lith. *dŭ'va* O.C.Sl. *davě*, see I § 547 p. 401.

Remark. The forms of the 2<sup>nd</sup> pl. found in old Lith. books, *destit(e)* and *dŭstit(e)* instead of *dēste* and *dŭste*, were derived from the 3<sup>rd</sup> sing. and pl. on the analogy of *tŭri-i(e)*: *tŭri*, to distinguish more clearly 2<sup>nd</sup> plural from 3<sup>rd</sup> singular and plural.

Class IV.

Reduplication ending in *-ĩ* or *-ũ* + Root + Thematic Vowel, forming the Present Stem.

§ 547. This class, like Class II, falls naturally into two sections, according as the root has the strong or the weak grade. The strong form, as in Class II, is the same as that of the non-thematic Conjunctive. Compare § 513 pp. 78 ff.

§ 548. A. Strong Root Syllable.

In Aryan, this section includes a large class of forms, the Sanskrit Causative Aorist; an aorist formation which generally is found along with the present formed by *-áya-* (§§ 795 ff.). As to the varying quantity of the reduplicating vowel, see § 473 pp. 17 f.

Skr. 3<sup>rd</sup> pl. mid. *á-bī-bhay-a-nta* beside *bi-bhē-ti* 'fears'. Imperative: mid. *pi-práy-a-sva* beside *á-pi-prē-t* 'he satisfied, pleased'. *á-cu-cyav-a-t* beside 3<sup>rd</sup> pl. *á-cu-cyav-ur* from *cyu-* 'to move, stir'.

Skr. *á-ti-tar-a-t* Avest. *ti-tar-a-þ* from Skr. *ti-tar-ti* 'gets over or beyond'. Skr. *pi-par-a-t* from *pi-par-ti* 'fills', *á-dī-dhar-a-t* beside 2<sup>nd</sup> and 3<sup>rd</sup> sing. *dī-dhar* from *dhar-* 'hold fast'. Avest. *bī-bar-ami* (cp. Skr. conj. 2<sup>nd</sup> sing. *bi-bhar-a-si*) beside Skr. *bī-bhar-mi* 'I carry'. Skr. *a-jñ-jan-a-t* 'was born' Avest. *zī-zan-a-þ* 3<sup>rd</sup> pl. *zī-zan-a-nti*, √ *gen-*.

Skr. *á-pī-pat-a-t*, √ *pet-* 'fly', *á-sī-śad-a-t*, √ *sed-* 'sit'.

On the Irish conjunctive, used for the future, of which we have an example in *gignid* 'nascetur' for *\*gi-gen-a-ti*, see § 544, page 103.

Germanic. Apparently we have a form of this sort in Goth. *rei-rái-þ* 'moves, trembles', connected with Skr. *lē-lāy-a-ti* 'wavers, trembles'; it may come from pr. Germ. *\*ri-rēi-ō* (§ 469 p. 14, § 708). But this is not a certainty, because it has not yet been made out to what vowel series the root belongs (in Sanskrit we see a pret. *á-lē-lē-t*, § 568).

## § 549. B. Weak Root Syllable.

Roots with *i-* and *u-* vowels. Avest. imper. *di-dy-a* (conj. *di-dy-a-p*), Gr. *διζομαι* for \**di-dk-o-mai* beside Avest. *di-daēti*, see § 537 p. 97; *di-ζη-μαι* (Class XI): *di-ζ-o-mai*: Avest. *di-daēti* = *-ni-nλη-μ*: Skr. *á-pi-pr-a-ta*: Skr. *pt-par-ti*. Skr. *ji-ghy-a-ti* 'drives on' beside *hi-nō-ti* Class XVII; *gh* instead of *h* (I § 445 p. 331, § 454 p. 335) answers to *k* in the 3<sup>rd</sup> pl. *ct-ky-ati*, see § 537 Rem. p. 98. Also Skr. aorists such as *á-śi-śriy-a-t* from *śri-* 'lean' (cp. *á-śi-śrē-t*), *á-ci-kṣip-a-t* from *kṣip-* 'throw', *á-rī-riṣ-a-t* from *riṣ-* 'take hurt', *á-śu-śruv-a-t* from *śru-* 'hear', *á-cu-krudh-a-t* from *krudh-* 'grow angry', *á-dū-duṣ-a-t* from *duṣ-* 'grow bad, go to rack and ruin'.

## § 550. Roots with other vowels.

Pr.Idg. \**gi-ġn-ō*, √ *ġen-* 'gignere': Gr. *γί-γν-ο-μαι* Lat. *gi-gn-ō*, cp. \**gi-ġen-o-* § 548. \**si-zd-ō*, √ *sed-* 'sit': Skr. *sīdati* instead of \**sīd-a-ti* (I § 591 p. 447, § 593 p. 449, compare Bartholomae in Bezz. Beitr. xvii 117), Gr. *ἴζω* i. e. *hizdō* (I § 593 p. 449), Lat. *sīdō* (I § 594 p. 450).<sup>1)</sup> \**ni-nd-ō* 'I scold, blame' beside Skr. *nad-* 'shriek, roar' Gr. *ὀνοοῦε* 'ye blame, scold' for *ὀνοδ-* (cp. Avest. 2<sup>nd</sup> pl. *nista* = \**nīsta*, § 540 p. 101): Skr. *nind-a-ti* 'scolds, abuses', with which became associated *nīd-* 'reviling, rebuke' *á-nēd-ya-s* 'blameless' and other similar words, Gr. \**nīndō*, whence *ὀνειδος* 'blame'.<sup>2)</sup> \**si-st-ō*, √ *stā-* 'stare': Skr. *tī-ṣṭh-a-ti* Lat. *si-st-i-t*; \**pi-b-e-ti*, √ *pō-* 'drink': Skr. *pi-b-a-ti* Lat. *bi-b-i-t* O.Ir. *i-b-i-d*, see § 539 p. 100.

1) Bechtel does not convince me that I am wrong in supposing the Idg. form to be \**si-zd-ō* (Bechtel, Hauptprobl. der Idg. Lautlehre, 254). That *aīd'μαι* comes from *aīzd-* or *aīsd-* is unproven. Compare Idg. Forsch. I 171 f.

2) This conjecture (cp. Osthoff, Perf. 394 f., and Bartholomae, Ar. Forsch. II 84, Bezz. Beitr. xvii 116) seems to me more likely than that suggested by others (as Fick, Wtb. I<sup>4</sup> 96), namely, that Skr. *nind-a-ti* was formed from a √ *nejd-* on the principle of Class XVI. The Skr. re-formation perf. *ni-nind-a* etc. may be compared with perf. *sīd-atur* fut. *sīd-iṣya-ti* beside *sīd-a-ti*.

§ 551. Aryan. Skr. 3<sup>rd</sup> pl. *á-bi-bhr-a-n* partic. *bī-bhr-a-māna-s* from *bī-bhar-ti* 'bears', cp. Avest. *bī-bar-ami* (§ 548 p. 105). Skr. 3<sup>rd</sup> sing. *á-pi-pr-a-ta* from *pī-par-ti* 'fills'. Skr. *jī-ghr-a-ti* from *jī-ghar-ti* 'smells'. Skr. *jī-ghn-a-tē* from *han-* 'strike, slay'. Skr. *pī-bd-a-tē* 'becomes firm, strong', √ *ped-*. Skr. *tī-ṣṭh-a-ti*, Avest. *hi-št-a-iti* O.Pers. mid. *a-i-št-a-tā*: Lat. *si-st-ō*, § 550. Skr. 3<sup>rd</sup> pl. *mi-m-a-nti* from *mī-mā-ti* 'roars' opt. *mi-mī-ya-t*.

Another group of forms which comes in here is composed of such Skr. aorists as *á-vi-ryt-a-t* from *vart-* 'vertere', *á-cī-kṛp-a-t* from *kalp-* 'help', *á-pi-sprś-a-t* from *sparś-* 'touch', *á-ci-krad-a-t* from *krand-* 'roar'. A great many others were cast in the same mould as these; for instance, *á-mī-mṛṇa-t* from *mṛ-ṇā-ti* 'crushes'.

§ 552. Greek. *γί-γν-ο-μαι*, see § 550. *μὴ-μν-ω* beside *μέν-ω* 'I remain'. *ἔ-σχε-ω* beside *ἔχω* (\**σεχ-ω*) 'I hold, have', √ *segh-*. *πί-πτ-ω* 'I fall'; whether *ι* was original (cp. Skr. *á-pī-pat-a-t*, § 548 p. 105) is very doubtful; see § 473 p. 18. *τίκτω* 'I beget' for \**τι-τε-ω* beside *ἔ-τεκε-ο-ν*, cp. the Author, Gr. Gr.<sup>2</sup> § 62 p. 74. *λάχω* 'I cry out, shriek' for \**λι-φυχ-ω*, cp. *δυσ-ηχής* (cp. W. Schulze, Kuhn's Zeitschr. xxix 230 ff.).

On present stems extended by the suffix *-ιο-* see § 733.

§ 553. Italic. Lat. *gi-gn-ō*, see § 550. Lat. *sīdō* for \**si-zd-ō*, the second sibilant of which is kept in Umbr. *ander-sistu* 'intersidito' for \**-sīzd(e)tō* (cp. *ander-sesust* 'intersederit'): <sup>1)</sup> Skr. *sīd-a-ti* etc., see § 550. Lat. *serō* 'I sow' for \**si-s-ō*, beside Gr. *ἵ-η-μι*, § 539 p. 99. Lat. *bibō* instead of \**pi-b-ō*: Skr. *pī-b-a-ti* etc., see § 539 p. 100; for the assimilation of *p-* to *-b-*, cp. Umbr. *řeře* 'dedit' instead of \**teře* (fut. perf. *teṛust dīrsust*). Vest. *dī-d-e-t* 'dat' (Pelign. *dīda* 'det' Umbr. *dīrsa dērsa* *teṛa* 'det' *dīrstu* *teṛtu* 'dato'), beside Gr. *δί-δω-μι*, § 539 p. 99. Compare § 871, on Osc. *fi-fik-us*.

1) For this explanation of the Umbrian form I have to thank a former pupil, Dr. von Planta. See now his dissertation, *Vocalismus der osk.-Umbr. Dialekte*, Strassburg 1892, pp. 214, 277, and his *Grammatik*.

§ 554. O.Ir. *i-b-i-d* 'bibit' for \**pi-b-e-ti*: Skr. *pi-b-a-ti* etc., see § 539 p. 100. As to *-airissim -airissiur* 'I stand, remain standing, exist', see § 733.

Futures like *do-bēr* 'I will give' may be also added; they were originally *a*-conjunctives of this class. See § 565.

#### Class V:

Reduplication in *-e* (*-ø*) + simple Root, used for the Present Stem.

§ 555. This class has a very close connexion with the Perfect. The two are distinguished in the indic. present by different personal endings (cp. Skr. 3<sup>rd</sup> pl. *sá-śc-ati*: perf. 3<sup>rd</sup> pl. *sa-śc-úr*, from  $\sqrt{\text{seq-}}$  'be with, accompany'), and in the vocalisation of the singular, as 3<sup>rd</sup> sing. Idg. \**se-seq-ti* (Skr. \**sa-sak-ti*): perf. \**se-soq-e* (Skr. \**sa-sāc-a*). But there was no difference at all between the Preterite of Class V and the Preterite of the Perfect Class (pluperfect), nor between their Conjunctive, Optative, and Imperative moods. Perhaps there was originally only Class VI, which now appears complementary to the fifth class (Skr. *sá-śc-a-ti* Gr. *ἔσπ-ο-ι-το*), but then had the same relation to the perfect as Class II to I, Class IV to III; and then perhaps the indic. present forms of the fifth class were coined on the analogy of classes I and III.

§ 556. Aryan. Skr. *ja-ján-ti* (grammarians), Avest. *za-zan-ti* 'gignit' (Bartholomae, Ar. F. II 82); cp. *á-ji-jan-a-t* *zā-zan-a-p* § 548 p. 105. Skr. 3<sup>rd</sup> pl. *sá-śc-ati*, see § 555; cp. *st-śak-ti* § 540 p. 100. *bá-bhas-ti* 'chews, eats' 3<sup>rd</sup> pl. *bá-ps-ati*, conj. *ba-bhas-a-t*. *á-ja-kṣ-ur* 'they ate', imper. *jagdhi* for \**ja-gṣ-dhi*, partic. *ja-kṣ-at-* from *ghas-* 'eat' (there is a re-formed 3<sup>rd</sup> sing. *jakṣi-ti* on the lines of Class IX); with thematic vowel *ja-kṣ-a-ti*. Partic. *já-kṣ-at-* from *has-* 'laugh'. Avestic *ni-šarṇhasti* for \**sa-sasti* Idg. \**se-sed+ti*,  $\sqrt{\text{sed-}}$  'sedere'; — perhaps a parallel thematic by-form is Gr. *ἔζομαι* i. e. *É-zō-o-mai* (§ 563).

Skr. *dā-dhā-ti* 'places' *dā-dā-ti* 'gives' Avest. *da-ḍa-iti*, see § 540 p. 99. Skr. *jā-hā-ti* 'leaves, gives up' 1<sup>st</sup> pl. *ja-hi-mas* 3<sup>rd</sup> pl. *ja-h-ati*, Avest. *za-zā-iti*; — with thematic vowel, Skr. *ja-h-a-ti*.

§ 557. Greek. Lesb. ἔλλαθι 'be gracious' for σε-σλα-θι, pl. ἔλλατε, beside ἴλαθι Class III, § 542 p. 102. κέ-κλυ-θι 'hear', pl. κέ-κλυ-τε: but Skr. *á-śu-śrav-ur* belong to Class III. εἰπ-α 'I spoke' (Cret. Gort. προ-φειπάτω) contains a stem \*ue-μq- (as regards φειπ- for \*μῆμq-, see the Author, Kuhn's Zeitschr. xxv 306, Gr. Gr.<sup>2</sup> p. 157; Wackernagel, Kuhn's Zeitschr. xxix 151 f.; Meillet, Mém. Soc. Ling. vii 60); this weak stem eventually ran right through (cp. Skr. *da-d-mi* § 541 p. 101, Lith. *dēmi* for \**de-d-mi* § 546 p. 104); the -α of εἰπ-α-ς εἰπ-α-τε is to be explained as in ἔχενας, see § 504 p. 67; — with thematic vowel, Skr. *á-vṛc-a-t* Gr. ἔ-ειπ-ο-ν, see § 661.

§ 558. Keltic. Original Conjunctives of this class (cp. Skr. *ba-bhas-a-t*) are the Irish reduplicated futures, Mid.Ir. *ge-gn-a* 'vulnerabo' O.Ir. *do-gega* 'eligam' etc. They originally had the thematic vowel, which they exchanged for *a* in the same way as did the future of which *gignid* is an example, Class III § 544. However, the *e* of the reduplicator is doubtless, as Thurneysen says, a mutation of *i* (Kuhn's Zeitschr., xxxi 77 f.); then the forms are not different from *gignid* and others of that kind.

§ 559. Balto-Slavonic. Lith. *dēsti* 'lays' for \**dhe-dh+ti* instead of \**dhe-dhē-ti*, Lith. *dā'sti* O.C.Sl. (Russ.) *dastī* 'gives' for \**dō-d+ti* instead of \**de-dō-ti*, see § 546 pp. 103 f.

§ 560. Forms with Idg. *ē* instead of *e* in the Reduplication (§ 472 p. 17). These are Intensives in Sanskrit; e. g. Skr. *dā-dhar-ti* beside (*dar-dhar-ti*) from *dhar*- 'hold fast', 3<sup>rd</sup> pl. *nā-nad-ati* from *nad*- 'shriek, roar'; cp. Avest. partic. *pā-per't-āna*- neut. used as a subst. 'fighting'.

Skr. *jā-gar-mi* 'I watch' 3<sup>rd</sup> pl. *jā-gr-ati* imper. *jā-gr-hi*, and an irregular form with weak stem, *jā-gr-mi*; — thematic



*jā-gr-a-ti*. Compare perf. *jā-gār-a* Gr. ἐγγή-γερ-μαι. On the *g* of *jā-gar-mi*, see § 537 Rem. p. 98.

Remark. The fut. *jāgarīṣyati* perf. *jājāgāra* may be compared with *laṣīṣyati lalāṣa* beside *laṣati* for \**le-ls-e-ti*, with *jahiṣyati dījahat* beside *ja-h-a-ti* (§ 562), and others like them; see § 752.

A Greek intensive of this sort is Hom. δῆ-δέχ-αται 'they welcome, greet' imperf. δῆ-δεκ-το (read δῆ-, not δει-, — so J. Wackernagel), from δέχομαι δέχομαι 'I receive'.

### Class VI.

Reduplication in *-e (-ē) + Root + Thematic Vowel* forming the Present Stem.

§ 561. On the relation of this class to the last, see § 555.

Pr. Idg. \**ghe-ghn-o-* from √ *ghen-* 'strike, kill': Skr. partic. *ja-ghn-a-nt-* (cp. *ji-ghn-a-tē* § 551 p. 107), Gr. ἔ-πε-φν-ο-ν inf. πε-φν-έ-μεν; conj. Avest. *ja-γν-ā-ḥ*. \**ue-uq-o-* from √ *ueq-* 'speak': Skr. *á-vōc-a-t*, Gr. ἔ-ειπ-ο-ν inf. εἰπ-εῖν (on *Feip-* for \**ue-uq-* see § 557). \**se-sq-o-* from √ *seq-* 'be with, accompany': Skr. *sá-śc-a-ti*, Gr. ἔ-σπ-ε-το opt. ἔ-σπ-ο-ι-το inf. ἔ-σπ-έ-σθαι. Skr. *dá-dh-a-ti* 'places', Lith. *de-d-ù*, √ *dhē-*.

§ 562. Aryan. Skr. partic. *ja-ghn-a-nt-*, Avest. 3<sup>rd</sup> pl. *ja-γν-e-nti* conj. *ja-γν-ā-ḥ*: Gr. ἔ-πε-φν-ο-ν etc., see § 561. Skr. *á-vōc-a-t*, Avest. *vaoc-a-ḥ* imper. *vaoc-ā*: Gr. ἔ-ειπ-ο-ν, see § 561. Skr. *yēṣ-a-ti* 'boils' for pr. Ar. \**ḡa-ḡs-a-ti* ground-form \**je-js-e-ti* from √ *jes-* (Skr. *yás-ya-ti* Gr. ζέω), cp. with *ḡo*-extension Avest. *yaṣṣyeiti* § 733; Skr. *á-yēṣ-a-t* served as model for *á-nēṣ-a-t* from *naṣ-* 'to be destroyed' (Avestic has *naṣa-ḥ*, regular), and the perfect *nēṣ-úr* follows *sēd-úr yēm-úr*, unless it is preferable to derive *á-nēṣa-t* directly from the perfect stem, and regard it as a pluperfect (§ 854). Skr. *laṣa-ti* 'desires' probably for \**la-lṣ-a-ti* (I § 259 p. 212), cp. *lā-las-a-s* 'covetous' Gr. λιλᾶσμαι 'I desire' for \**λi-λασ-ḡo-μαι* (§ 733). Skr. *á-pa-pt-a-t*, √ *pet-* 'shoot through the air, fly'. Skr. *sajjatē* 'hangs to something, sticks' for \**sa-zj-a-* (I § 591

pp. 448 f.),  $\sqrt{\text{seg-}}$  (Lith. *seg-ù* 'I fasten'). Skr. *dá-dh-a-ti* 'places' *dá-d-a-ti* 'gives' Avest. *da-p-a-iti* from  $\sqrt{\text{dhē-}}$  and  $\sqrt{\text{dō-}}$ , see § 540 p. 99, § 561. Skr. *ja-h-a-ti* 'leaves, gives up'; see § 556 p. 109. Skr. *rā-r-a-tē* from *rā-* 'pour', cp. 2<sup>nd</sup> pl. *ra-rī-dhvam* (§ 538 p. 98).

With *a* = Idg. *ē* in the reduplication (cp. § 560) Skr. *ja-gr-a-ti* 'wakes' and Avest. 3<sup>rd</sup> sing. conj. *vāuraīitē* (for *\*vā-vr-*) from *var-* 'choose' (cp. Bartholomae, Bezz. Beitr. xiii 79 f.).

§ 563. Greek. *ἔ-πε-φν-ο-ν*, *ἔ-ειπ-ο-ν*, *ἔ-σπ-ε-το*, see § 561. This type of aorist was fertile in the Homeric dialect, and in the poetic style developed out of it (cp. Curtius, Verb., II<sup>2</sup> 29 ff.). We may add: *ἐ-κί-κλ-ε-το* from *κέλ-ο-μαι* 'I call, summon, ask', *πε-παλ-ών* from *πάλλω* 'I swing, brandish' ( $\sqrt{\text{pel-}}$ ), *τε-τάρπ-ε-το* from *τέρπω* 'I satisfy, refresh, please', *πε-πίθ-ο-ι-το* *πε-πιθ-ών* from *πείθω* 'I persuade', *πε-πύθ-ο-ι-το* from *πεύθω* 'I learn'. *λέ-λαθ-ο-ν* from *λήθω* 'I am hidden'. *τε-ταγ-ών* 'grasping'.

In the later language we find presents in connexion with these aorists, as *πέφνω*, *κέκλωμαι*. *ἔζομαι* is one of this sort; for *ἐ-ζδ-ο-μαι*, from  $\sqrt{\text{sed-}}$  'sit' (§ 556 p. 108), unless the form comes from *\*ἔδ-ιο-μαι* = O.H.G. *sizzu* Class XXVI (§ 721).

§ 564. Italic. Lat. *tendō* Umbr. *ostendu* 'ostendito' (I § 499 p. 366) is often derived from *\*te-tñ-ō* ( $\sqrt{\text{ten-}}$ ),<sup>1</sup> to which Gr. *τι-ταινώ* would be related in the same way as *λαλαίωμαι* to Skr. *laṣati* (§ 562), cp. Skr. *ta-tán-a-t*; others analyse *ten-dō*, and refer it to class XXV (cp. II p. 161 footnote 2, IV § 696); and now R. S. Conway identifies it with Gr. *τεινώ* for *\*ten-īō* (Class. Rev., v 297), as G. Curtius had done before him.

More certain examples may be found among the Latin perfects, as *te-tig-i-t*, *te-tig-i-mus*: Gr. *τε-ταγ-ών*, *pe-pul-i-t*: Gr. *πε-παλ-ών*. See § 867.

1) Bartholomae (Stud. idg. Spr. II 95) assumes that *\*te-tñō* by analogy of forms with *ten-* became *\*tentñō*, and hence *tendō*.

§ 565. Keltic. In this class we may place the Irish *a*-conjunctive with future meaning. O.Ir. *dobēr* 'I will give' 1<sup>st</sup> pl. *do-bēram* for *\*bhe-bhr-a-*, *✓bher-* 'ferre'. *fris-gēra* 'respondebit' beside pres. 3<sup>rd</sup> sing. *fris-gair*. *nad-cēl* 'quod non celabo' beside pres. *celim*. Mid.Ir. *fo-dēma* 'patietur' beside *fo-daim* 'patitur'. As regards the compensatory lengthening in these forms, see I §§ 523, 526 pp. 380 f. It is true that the Irish sound-laws do not make it certain that *e* was the original reduplicating-vowel of this conjunctive. It may have been *i*, and Thurneysen (Kuhn's Zeitschr., xxxi 81) assumes this in view of *gignid* etc. (§ 544 p. 103). Since in the reduplicated present both *e* and *i* have always been used side by side (cp. Skr. *ja-ghn-a-nt-* and *ji-ghn-a-tē* § 561 p. 110), it is hardly possible to draw the line.

§ 566. Balto-Slavonic. Lith. *de-d-ù* 'I lay': Skr. *dá-dh-a-ti*; Lith. *dū'd-u* 'I give' O.C.Sl. partic. *dad-y* 'giving'. See § 546 p. 104.

### Class VII.

#### Complete Reduplication + Root forming the Present Stem.

§ 567. On the form of reduplication used in this and the following thematic Class see §§ 465—467, 470, 474.

§ 568. Roots beginning in a Consonant. Certain examples only in Aryan (Intensive Verbs).

Skr. *car-kar-mi* imper. *car-kṛ-tad*, Avest. 1<sup>st</sup> pl. *car'-ker'-mahī* from *kar-* 'think of, remember'. Skr. 2<sup>nd</sup> sing. *dār-dar-ṣi* imper. *dar-dṛ-hi*, Avest. opt. *dar'-dair-yā-p* from *dar-* 'split';<sup>1)</sup> — with thematic vowel *dar-dir-a-t*. Skr. 3<sup>rd</sup> sing. mid. *sar-sṛ-tē* *sar-sr-ē* from *sar-* 'flow'. Skr. *jāṃ-ghan-ti* conj. *jaṃ-ghān-a-t*

1) The second syllable of the Avestic form shows irregularly the strong grade, unless *\*-dṛ-jē-t* (I § 306 pp. 241 f.) is to be assumed for the ground-form (cp. Skr. *dir-yā-t á-dar-dir-ur dar-dir-a-t*).

from *han-* 'strike, kill'. Skr. *ā-lē-lē-t* from *lā-* 'oscillate'. Skr. 1<sup>st</sup> pl. *nō-nu-mas* from *nu-* 'shriek, cry, call'; — with thematic vowel 3<sup>rd</sup> pl. mid. *nō-nuv-a-nta*. Skr. partic. mid. *jō-huv-āna-s* from *hū-* 'call'; — with thematic vowel Skr. *jō-huv-a-t*. Avest. *zao-zao-mī* 'I pour out, consecrate'. Skr. *vār-vart-ti* 3<sup>rd</sup> pl. *vār-vrt-ati* from *vart-* 'vertere'. Skr. mid. 3<sup>rd</sup> sing. *dē-diš-ṭe* 3<sup>rd</sup> pl. *dē-diš-atē* Avest. *daē-dōiš-t* from Ar. *diš-* 'show'; — with thematic vowel Skr. *dē-diš-a-m*.

Sanskrit has also some forms with *ī* after the reduplication (§ 467 p. 13). *barī-bhar-ti* 3<sup>rd</sup> pl. *bhāri-bhr-ati* from *bhar-* 'ferre'. Partic. *ghāni-ghn-at-* beside *jān-ghan-ti* (p. 112). *nāvī-nō-t* beside *nō-nu-mas* (see above). *varī-vart-ti* beside *vār-vart-ti* (above). *kāni-kranti* for *kāni-krad-at-* from *krand-* 'roar'.

§ 569. Roots beginning in a Sonant.

Skr. *āl-ar-ti* 'raises itself'.

Gr. *ἤν-εγχ-α* 'I brought' partic. mid. *ἐν-εγχ-άμενο-ς*, Idg. *\*en-eh₂-*. With *ἤνεγχε-ας -ατε* etc. compare *ἔχενας εἰπας* etc. § 504 p. 67. Whether the Skr. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *anaṣ* 3<sup>rd</sup> dual *anaṣ-ṭām* conj. 1<sup>st</sup> pl. *anaṣ-a-mahāi*, which belong to the same root, are reduplicated or not, is a question. *anaṣ-* may be derived from *\*en-eh₂-*, or from *\*enek-* (cp. Gr. *δι-ηγχε-ής*).

### Class VIII.

Complete Reduplication + Root + Thematic Vowel  
forming the Present Stem.

§ 570. Roots beginning in a Consonant.

Certain examples only in Aryan (Intensives), compare § 568. Skr. shows injunctives like *dar-dir-a-t*, *nō-nuv-a-nta*, *jō-huv-a-t*, *dē-diš-a-m*, see above. Avest. *naē-niž-a-iti* 'washes' beside Skr. *nē-nēk-ti* mid. *nē-nik-tē*: cp. conj. *vōi-vīd-a-itē* beside Skr. partic. *vē-vid-ana-s* from *vid-* 'find'.

§ 571. Roots beginning in a Sonant.

Armen. *ar-ar-i* aor. of *ar-ne-m* 'I make', Gr. *ἤρ-αρ-ο-ν* inf. *ἀρ-αρ-εῖν* aor. of *ἀρ-αρ-ίσκω* 'I fit'. Skr. *am-am-a-t* aor. of

*am-* 'injure' (pres. *amī-ti*) Gr. ἄγ-αγ-ο-ν ἄγ-αγ-εῖν from ἄγ-ω 'I lead'.<sup>1)</sup> 3<sup>rd</sup> pl. ἄν-άχ-ο-ντο from ἄν-αχ-ίζομαι 'I am troubled'. ἄλ-αλκ-ε 'I warded off'. ἤν-εγκ-ο-ν 'I brought'. ἐν-εγκ-εῖν beside ἤν-εγκ-α (§ 569). Compare § 470.

Skr. *ānin-a-t* (*prāṇina-t*) from *an-* 'breathe', *arjij-a-t* from *arj-* (*xj-*) 'direct, procure', *aubjij-a-t* from *ubj-* 'keep down', and other examples, only found in the grammarians. Gr. ἐρῶν-ο-ν from ἐρῶ-ω 'I hold back', ἡνίπαν-ο-ν from ἐνίπ-τω 'I address'. Compare § 474 p.

## B. CLASS IX.

ROOT + *-ə* OR ROOT + *-i*, WITH OR WITHOUT REDUPLICATION, FORMING THE PRESENT STEM.

§ 572. We have here two classes of forms to deal with; examples of which are (1) Skr. *vāmi-ti* Gr. ἄγα-μαι, and (2) Skr. *amī-ti*.

The first has *ə* after the root. Whether this *ə* was part of the root, as some scholars too confidently assert, or a true suffix (I § 14 p. 17), is doubtful. In Greek along with *α* are found both *ε* and *ο*. Bartholomae seems to be right in seeing here the Idg. *e* and *o* (Bezz. Beitr. xvii 109 ff.).

*-ə* was never found except before personal endings which begin with a consonant; cp. Skr. *rōdi-ti* pl. *rud-anti*.

Forms with *-i-* are only found in Aryan. This vowel, Idg. *i*, was certainly a suffix of some kind (root-determinative); a general discussion of it has been given above, § 498 pp. 61 f. Used in the same way we find *ai* in Sanskrit (*āj-ai-ṣ*), perhaps the same as *ei* in Gr. ἄγ-ει-ς ἄγ-ει (see p. 61 footnote). But it cannot be made in the least probable that *-i-* was ever confined to the plural and dual active and the middle of all three numbers, or *-ai-* to the singular active, like Skr. *kṛ-nu-más* etc. as contrasted with *kṛ-nō-mi*; *-i-* is particularly common in the singular active in Sanskrit.

1) On Benfey's Skr. *āj-ij-a-t*, see Hübschmann, Idg. Vocalsyst., 66; Bartholomae, Bezz. Beitr. xvii 116 f.

The spread of *-ī-* in Sanskrit was due in great part to a confusion with *-i-* = *-a-*. We have therefore to compare, say, *śami-ṣva* : *śamī-ṣva* with Skr. *á-dhi-mahi* : *á-dhī-mahi*.

It is not always possible to say whether *-ī-* was attached to a form in pre-Aryan times, or took the place of *i* = *a* in Aryan itself. Thus *-a-* and *-ī-* may here be comprehended in one class.

§ 573. To forms without Reduplication we cannot point with any confidence except in Aryan and Greek. But Bugge conjectures that some such are contained in the Arm. 2<sup>nd</sup> aorist mid., e. g. *cnay* from pres. *cnani-m* 'pario, gigno, nascor': *cna-* for *\*genə-* (cp. § 583 p. 125). See Bugge, Indogerm. Forsch., I p. 439.

§ 574. Sanskrit. Forms with *-i-*. *vámi-mi vámi-ti* (3<sup>rd</sup> pl. *vam-anti*, pret. *á-vam-ī-t*), beside Gr. *ἰμέω. áni-ti* 'breathes' 3<sup>rd</sup> pl. *an-ánti* (pret. *án-ī-t*). Imper. *stani-hi* from *stan-* 'thunder'. Imper. *śami-ṣva* from *śam-* 'take pains'. *rōdi-ti* 'laments, cries'. 1<sup>st</sup> pl. *rudi-mas* 3<sup>rd</sup> pl. *rud-anti* imper. *rudi-hi* (pret. *á-rōd-ī-t*). *svápi-ti* 'sleeps'. *śvasi-ti* 'snorts' imper. *śvasi-hi* instead of *\*śuṣi-hi* cp. mid. *śuṣ-ē* (pret. *á-śvas-ī-t*). Also *ṣṛ-ṇv-i-ṣé* beside *ṣṛ-ṇv-i-ré* like *ja-jñ-i-ṣé* beside *ja-jñ-i-ré*. On *iṣ-i-té* beside *iṣ-té*, see § 853.

*-i-* in these Verbs is not usually confined to the present stem. Compare *śami-ṣva* with *śami-tá-s á-śami-ṣ-ṭa* (Gr. *κάμα-ro-s*), *jáni-ṣva* with *jani-tár- jani-ṣyá-ti* (Gr. *γενί-τωρ* Lat. *geni-tor*).

To these I add a few forms which both Indian grammarians and European scholars call parts of the *iṣ-* aorist, to wit: 2<sup>nd</sup> sing. *varti-thās* from *vart-* 'vertere', *á-jay-i-t* from *ji-* 'conquer', *á-tāri-ma* from *tar-* 'move across, place or pass over', and like forms, along with the 2<sup>nd</sup> pl. mid in *-idhvam* instead of *-idhvam* (§ 839) given by the Indian grammarians, e. g. *ábōdhi-dhvam*. It is true the popular feeling associated these with the *s*-aorist, as it did the forms *á-dhi-thās á-dhi-ta á-kr-thās á-kr-ta*; but neither of the two kinds had any real

connexion in form with it (§ 816).<sup>1)</sup> Perhaps this apparent connexion was cemented by the original 2<sup>nd</sup> sing. of the *iṣ*-aorist, ending in *\*-iṣ* (for *\*-iṣ-ṣ*) which may have been unconsciously analysed into *\*-i-ṣ* (§ 839); cp. *ándit* following *ándiṣ* for *\*a-naiṣ-ṣ* (§ 816).

*-ī* is commonest in the 2<sup>nd</sup> and 3<sup>rd</sup> sing. pret. active (cp. the above examples). *am-ī-ti* 'injures' (3<sup>rd</sup> pl. *am-ánti*) imper. *am-ī-ṣva*. Imperative: *śam-ī-ṣva -dhvam* beside *śami-ṣva* (p. 115). *taṁ-ī-ti* 'thrives, is strong'. 3<sup>rd</sup> dual *á-grh-ī-tām* 'they seized' mid. 2<sup>nd</sup> sing. *grh-ī-thās* *grh-ī-ṣva*, 3<sup>rd</sup> sing. *á-grabh-ī-t*, cp. *gybh-ī-tā-s* *grah-ī-ṣya-ti* *á-grabh-ī-ṣ-ur*. *ds-ī-t* 'erat'.

The verb *bráv-ī-ti* 'says' has *-ī* only in those persons which elsewhere have *-i-*, and obviously follows the *i*-verbs: thus *bráv-ī-mi* *-ī-ṣi* *-ī-ti*, *á-brav-ī-ṣ* *-ī-t*, but *á-brav-am* *brū-más* *bruv-ánti*. Compare Avest. *mraom* i. e. *mrao-em* = *á-brav-am*, mid. *mrūyē* i. e. *mrūv-ē* (Bartholomae, Handb. § 92 p. 40) = *bruv-é*, *mrūitē* *mrū-ta* = Skr. *brū-tē* *á-brū-ta* and *mrao-ṣ* *mrao-ḥ* as contrasted with *á-brav-ī-ṣ* *-ī-t*, like Skr. 3<sup>rd</sup> sing. *ds* contrasted with *ds-ī-t*; but Avestic itself has a similar *ī*-form in *vyā-mrōita* (Y. 12. 6.), if Bartholomae rightly takes this as 3<sup>rd</sup> sing. mid. imperf. (see Kuhn's Zeitschr. xxviii 37, Stud. Idg. Spr. II 127). By levelling we have Skr. imper. *bravi-hi* instead of *brū-hi*, and *brū-mi* instead of *bráv-ī-mi*.

From presents in *-aya-ti*: Skr. *anay-ī-ṣ* from *āna-ya-ti* 'leaves unfulfilled', *dhvanay-ī-t* from *dhvanaya-ti* 'envelops', cp. opt. mid. *kamay-ī-ta* § 951.

This *i*- and *ī*-inflexion spread widely in Sanskrit because it often served to renew distinctions which had been worn away by phonetic change: *dstṣ* *dstt* are clear; *ds* for 2<sup>nd</sup> and 3<sup>rd</sup> person both, is not.

On the place which preterite forms in *-ī-ṣ* *-ī-t* filled in the *s*-aorist, see § 839.

1) *d-jayi-t*: 3<sup>rd</sup> pl. *á-jayiṣ-ata* = Gr. *ἐ-κρίμα-το* (*κρίμα-το*): 2<sup>nd</sup> sing. mid. *ἐ-κρίμασ-θης* (*κρίμασ-το-ς*), see § 840.

§ 575. Greek. The *ə*-flexion holds ground in the middle voice. *κρέμα-μαι* 'I hang' (cp. fut. *κρεμά-ω*, *κρεμά-θρᾱ* 'hanging basket'). *ἄγα-μαι* 'I revere, honour'; *ἀγα-* doubtless for *\*ηγə-*, from the root of *μέγα*; then *ἄγα-μαι*: a possible *\*μεγα-μι* as Skr. *rudi-mas* : *rōdi-mi*. Aor. *ἐπριά-μην* 'I bought' beside Skr. *kri-ñā-ti* 'buys' fut. *krē-ḡyá-ti* O.Ir. *cre-nim* 'I buy' conj. 3<sup>rd</sup> sing. *-cria* for *\*cri-ā-t*.

The active forms perhaps became thematic in prehistoric times: *ἐμέω* 'I spew' instead of *\*φεμε-μι*: Skr. *vámi-mi*, cp. *ἔμε-σσα*; *δαμάω* 'I subdue' instead of *\*δαμα-μι*, cp. *δάμα-σσα παν-δαμά-τωρ*; *ἐλάω* 'I drive' instead of *\*ἐλα-μι*, cp. *ἐλα-σσα ἐλα-τήρ*; *ἀρόω* 'I plough' instead of *\*άρο-μι*, cp. *ἀρ-ηρο-μένο-ς ἦρο-σα ἄρο-τρο-ν*. On *-ε-* and *-ο-* beside *-α-* see § 572 p. 114. But the *σσ*-aorist makes it possible to regard these forms as originally ending in *-εσ-ω* *-ασ-ω* *-οσ-ω*, and answering to Skr. *tarás-a-ti arcas-ē*. See §§ 661, 842.

Remark. Many other forms seem to be of this group, but their explanation is obscure. See, for example, § 550 p. 106 for *δνο-σαι δνο-νται*, Osthoff Perf. 371, 409 for *πίτα-μαι*, the Author in Kuhn's *Zeitschr.* xxiii 587 ff. for *ἱεα-μαι*. On *ἱ-χια-ς ἱ-χία-μεν* and the like, which some scholars place in this category, see § 504 p. 67.

§ 576. In Latin, Germanic and Balto-Slavonic *-ə-* and Idg. *-o-* (in Latin, Idg. *-e-* as well) must necessarily run together into the same sound. Thus it is always possible that verbs which in these languages belong to Class II originally had *-ə-* and belonged properly to the ninth class. Lat. *vomi-t* *vomi-mus* cp. Skr. *vámi-ti*. Goth. *-anan* 'breathe, blow' cp. Skr. *áni-ti* (1<sup>st</sup> pl. *-ana-m* like *ani-mas*), O.H.G. *riozan* 'cry, weep' cp. Skr. *rōdi-ti*, A.S. *swefan* O.Icel. *sofa* 'sleep' cp. Skr. *svápi-ti*. Lith. 3<sup>rd</sup> sing. *raūda* 'cries, weeps' Lett. *rāud*, beside O.H.G. *riozan* and Skr. *rōdi-ti*. Certainty is very far from possible here; indeed, even in Sanskrit these roots can be inflected like Class II: *vam-a-ti*, *án-a-ti an-ā-ti*, *rōd-a-ti rud-a-ti*, *sváp-a-ti*.

§ 577. Forms with Reduplication only found in Sanskrit; all have *-i-*.



-ī- in the 2<sup>nd</sup> and 3<sup>rd</sup> sing. of some preterites which are usually called pluperfect: as *ā-ja-grabhī-t* (1<sup>st</sup> sing. *ā-ja-grabh-am*) from *grabh-* 'seize', *ā-bu-bhōjī-ṣ* from *bhuj-* 'bend'.

Intensive: *vā-vadī-ti* from *vad-* 'speak', *pā-patī-ti* from *pat-* 'fly'. Compare § 560 pp. 109 f. Intensive: *dar-darī-ti* from *dar-* 'split' beside *dār-dar-ṣi*, *tar-tarī-ti* (and with irreg. strong stem, 2<sup>nd</sup> dual *tartarī-thas*) from *tar-* 'step over', *nan-namī-ti* from *nam-* to 'bow, bend oneself', *rā-ravī-ti* from *ru-* 'roar, cry', *jā-havī-ti* from *hā-* 'call'. Compare § 568 p. 113. The root syllable is never followed by -ī- when the reduplication ends in ī: cp. § 467 p. 13.

### C. CLASSES X AND XI.

#### ROOT + *-ā-*, *-ē-*, OR *-ō-* FORMING THE PRESENT STEM.

§ 578. We have here to examine forms such as Gr. *ἔ-δρ-α-ν*, *ἔ-βλ-η-ν*, *ἔ-σβ-η-ν*, *ἔ-γν-ω-ν*. These vowels<sup>1)</sup> *-ā-*, *-ē-*, and *-ō-* never had any gradation, and the long vowel always runs right through all numbers of active and middle in the Indicative. But some modifications have arisen by a certain law affecting the European languages, by which long vowels were shortened before *n* or *i* + consonant; as Gr. 3<sup>rd</sup> pl. *ἔ-γνον* for *\*ἔγνω-ν(τ)*, opt. 1<sup>st</sup> pl. *γνοῖμεν* for *\*γνωκ-μεν* (I §§ 611, 612, 614, 615 pp. 461 ff.).

Originally the root had always its weak grade. In the aorists here cited it has ceased to be a syllable. But a syllable it still is in some forms, as *\*bhuyā-*: Lat. (conj.) *fuā-s* Lith. *būvo* (beside *\*bhuyā-* in Lat. *-bās*); *\*iḡ-*: Skr. *iyā-t*, cp. perhaps Goth. *iddja*, whose *i-* may also be an augment (*e-*) (beside *\*i-ē-* in Skr. *yā-ti*); *\*myñ-*: Gr. *ἰ-μάρη* Lith. *mīnē*; *\*liq-*: Gr. *ἰ-λίπη* Lat. *lice-t*; Gr. *ἰ-βάλ-η* (beside *ἔ-βλ-η*).

These suffixes had properly nothing to do with either aorist or present meaning. This is clear because they never have been confined to one particular stem. We find them in

1) The newest theory on "Root-Forms in *ā-*" may be seen by referring to Kretschmer, Kuhn's *Ztschr.* xxxi 408 ff.

the Perfect, as Skr. *pa-prāú* Gr. *πέ-πλη-νται*; in the Aorist, as Skr. 3<sup>rd</sup> sing. *á-prā-s* Gr. *ἔ-πλη-σ-α*; in the Participle, as Skr. *prā-tá-s* Lat. *im-plētu-s*; and in the Present, Skr. 2<sup>nd</sup> sing. *prā-si* Lat. *im-plē-s* from stem *\*pl-ē-* 'fill'  $\checkmark$  *pel-*. Often it is just in the present stem that the stems formed with these suffixes do not occur; for instance, we have Skr. fut. *hv-a-sya-tē* O.C.Sl. aor. *zūv-a-chū* Skr. *hv-a-tar-* O.C.Sl. *zūv-a-telŕ* 'caller', but pres. Skr. *hāv-a-tē* O.C.Sl. *zov-e-tū* 'calls'; Skr. *jñ-a-ti-š* 'near kinsman' Gr. *κασί-γνητο-ς γν-ω-ρό-ς* 'kinsman, brother' Goth. *knōþs* (Stem *kn-ō-di-*) 'stock, tribe' from  $\checkmark$  *ġen-* 'gignere'; Gr. *ἐνι-σπή-σω* 'I will say' O.Icel. *skald* 'poet' for pr. Germ. *\*skē-ālā-* (Lidén, P.-B. Beitr. xv 507) from  $\checkmark$  *seq-* 'say' pres. *ἐν-έπω*.

These forms with *-ā-* in Italic, Keltic, and Slavonic are also used for the Conjunctive. Besides Lat. *fua-s* given above we may cite *tulā-s* (cp. Gr. Dor. *ἔ-τλā-ς*). It is no more strange to find these suffixes in two moods than to find *-e-* and *-o-* in both indicative and conjunctive.

So with the *-ē-* which meets us in Italic future and conjunctive series, as Lat. fut. *so-lv-ē-s* conj. *ī-r-ē-s* Osc. *sakraīter fusíd* (§ 926), must be identified with *-ē-* in *ἔ-βλ-η-ν ἰ-μάν-η-ν*; compare Lat. *ed-e-t* with Lith. pret. *ėd-ė*, Osc. *fu-i-d* 'sit' (*i* = *ē*) with Gr. pret. *ἔ-φύ-η*.

Greek, in the mood answering to the Latin *a*-conjunctive, has a variation, sometimes *-η-* and sometimes *-ω-*; as *λίπη-τε λίπω-μεν*. Perhaps there were originally two sets of conjunctive forms, one with *-ē-* and one with *-ō-*; and from these a mixed paradigm was made, *-ē-* or *-ō-* being taken according as the corresponding indicative form had *-e-* or *-o-*. If so, the conjunctive *λίπη-τε* must be really the same as the aorist passive (*ἔ*)*λίπη-τε*, Lat. *fua-s* the same as *-bās*, *tulā-s* the same as Gr. (*ἔ*)*τλā-ς*. There was a closer connexion between *-ē-* and *-ō-* than either of them had with *-ā-*, as is proved by such forms as *\*ġi-ē-* Gr. ζῆ: *\*ġi-ō-* ζώ-ω, *\*bhs-ē-* Gr. βῆ: *\*bhs-ō-* ψω-ρό-ς (other examples in § 587).

It would probably be much easier to thread our way through this labyrinth if we knew which of the three sounds

is represented by the *-ā-* of Aryan conjunctives. In the indicative forms, non-Aryan languages often give the clue; thus we derive Skr. *prā-si* from *\*plē-si* because Greek has *πλῆ-ρο* and Latin *-plē-s*, but *drā-ti* we derive from *\*dr-ā-ti* because of Greek *ἔ-δρᾶ-ν*.

Such of these forms which serve for the Conjunctive will be left for examination together when we come to the Conjunctive, §§ 918 ff. (cp. § 489 pp. 47 f.).

As has already been mentioned (§ 487 p. 41), I believe that this *-ā-* suffix is the same as the feminine suffix *-ā-*; compare Skr. perf. *ji-jyāú jyā-sya-ti* Gr. Ion. *βε-βίη-ται βιή-σατο* with the fem. Skr. *jyā-*, *jiyā-*, Gr. *βιά*, from *√gei-* subdue, force' (Skr. *jáy-a-ti ji-nā-ti*). This is no bolder than to suppose that indic. *ἄγ-ο-μεν* and conj. *εἰδ-ο-μεν* contain the same *-o-* as *ἀγ-ό-ς*. And some verbal stems with *-ē-* are actually used as nouns, as Gr. *χρ-ή* 'necessity' beside *κέ-χρη-μαι χρ-ῆ-σθαι*; Hom. *όμο-κλ-ή*, 'loud cry or call' beside Cret. partic. *ἀνα-κλή-μενο-ς*; Lat. *qui-ē-s* abl. *quiē* beside perf. *quiē-vi*; Skr. *ps-ā-* 'food' beside *ps-ā-ti* cp. *ψῆ* for *\*ψη-ιει*. The same *-ē-* nouns are seen in Lat. *plē-bam*, *licē-bat*, *arē-bat*, *are faciō*, O.C.Sl. *bē-achū žirē-achū* and the like (§ 896 Rem., §§ 899, 903).

Verbs made with these suffixes are often extended by *-iō-*; as beside Skr. *sn-ā-ti* 'washes, bathes' Lat. *nā-s nā-mus* we have Skr. *snā-ya-tē* Lat. *nō* for *\*nā-(i)ō* O.Ir. 3<sup>rd</sup> sing. *snāid*; and it is impossible to draw a distinct line between the older inflexion and that with *-iō-*. Thus we must make frequent comparisons with the *iō-* conjugation of Class XXVIII.

In one other respect it is difficult, if not impossible, to draw a hard and fast line. The class of verbs to which grammarians mostly restrict the term Denominative are often inseparable from this tenth class and its *iō-* extension; as Lat. *plantō* (for *\*plantā-(i)ō plantā-s* etc. from *plantā-* 'plant' like *nōnās* etc., Gr. Lesb. *ἰ-τίμα-μεν ἰ-τίμα-τε* from *τίμα-* 'honour' like *ἔ-δρα-μεν ἔ-δρα-τε*, Armen. *jana-m jana-mk̄* like *mna-m mna-mk̄*. That these denominatives had originally only *-iō-* (or

-*je*) in all persons cannot be proven (cp. § 487 p. 42); and in view of the great number of forms like Lat. *plantā-s plantā-mus* without -*je* in the Idg. languages, it is very improbable.

### Class X.

Unreduplicated Root + -*ā*- -*ē*- or -*ō*- forming the Present Stem.

#### § 579. Root + -*ā*-.

Pr. Idg. \**dr-ā-ti* 'runs' (cp. Skr. *dr-āva-ti dr-ama-ti* etc., § 488 p. 47): Skr. *drā-ti* imper. *drā-hi*, Gr. ἔδρα-ν ἔδρα-μεν. \**tr-ā-ti* (cp. Skr. *tar-* 'press through, pass over'): Skr. *trā-ti* 'rescues, saves' (orig. 'lets go through, or gets happily out of') mid. *trā-sva trā-dhvam* (*trā-ya-tē*), Lat. *in-trā-s -trā-mus* (1<sup>st</sup> sig. -*trō* for \*-*trā-je*) and *trans* Umbr. *traf trahaf* 'trans' (orig. nom. sing. of the participle, see Thielmann, Arch. Lat. Lex. iv 248 ff., 358 ff.).<sup>1)</sup> \**sn-ā-ti* 'washes, bathes' intr. (cp. Skr. *sn-āu-ti* 'trickles' partic. *sn-u-ta-s*, Gr. ν-έω fut. ν-έ-σομαι): Skr. *snā-ti* 3<sup>rd</sup> dual *snā-tas* (*snā-ya-tē*), Lat. *nā-s nā-mus* (1<sup>st</sup> sing. *nō*), cp. Gr. νάω 'I flow' νά-μα. \**bhy-ā* \**bhuy-ā* from √*bhey-* 'become, be': Lat. -*bā-s -bā-mus*, O.Ir. 3<sup>rd</sup> sing. *bā ba* (conj. and fut.), Lith. *būvo* 'was' *būvo-me*; variant \**bhy-ē* \**bhuy-ē*, see § 587. \**sruy-ā* from *srey-* 'flow': Gr. Epidaur. ἐρρύα 'flowed', Lith. *pa-srūvo* 'flowed'; variant \**sruy-ē* Gr. ἐρρύη § 589. \**g-ā-t* \**e-g-ā-t* 'went' (cp. \**g-em-*, § 497 Rem. p. 57): Skr. *ā-gā-t ā-gā-ma*, Gr. ἔβη ἔβη-μεν. Sometimes verbs which originally belonged to Class I, and had gradation, were absorbed into this class and lost it: see § 495 p. 55.

Examples of similar conjugation in later denominative verbs from *ā*-stems: 1<sup>st</sup> pl. Armen. *jana-mē*, Gr. Aeol. τῖμα-μεν, Lat. *plantā-mus*, O.Ir. *no chara-m*, Lith. *jūsto-me*.

It is naturally often doubtful whether an *ā*-verb belongs to the Primitive or the Denominative class, to use the terms

1) *intrāre extrāre* were clearly regarded by the Romans as derived from *intrā extrā*. But *trāns* makes it quite as probable that they are compounds of \**trāre*. F. D. Allen, Am. Journ. Phil. i 143 ff., does not convince me.

in their received sense. For example, Lat. *forō forās*, O.H.G. *borōm borōs* 'I bore', common ground-form *\*bhgr-ā-*, beside O.H.G. *bora* f. 'borer' (cp. § 769).

§ 580. Aryan. Besides those mentioned in § 579, there are few Aryan verbs which can fairly be supposed to have original *-ā-*, to judge from the cognate languages. Skr. *śr-ā-ti* (gramm.) beside *śrā-ya-ti* 'cooks, roasts' from  $\sqrt{\text{ker-}}$  (Gr.  $\kappa\epsilon\rho\acute{\alpha}\sigma\sigma\alpha\iota$ , Skr. *śr-tā-s*); cp. Gr.  $\mu\iota\chi\omicron\mu\iota$  'I mix' Class XI, perf.  $\kappa\acute{\epsilon}\chi\omicron\mu\epsilon\tau\alpha\iota$ ,  $\acute{\alpha}\chi\omicron\mu\epsilon\tau\omicron\varsigma$  'unmixt' (= Skr. *śrā-tā-s*). Skr. *ml-ā-ti* 'softens, slackens, decays' 3<sup>rd</sup> pl. *ml-ā-nti* (beside *mlā-ya-ti*) from  $\sqrt{\text{mel-}}$  'molere', cp. Gr. Dor.  $\beta\lambda\acute{\alpha}\xi$   $\beta\lambda\eta\chi\rho\acute{o}\varsigma$  'slack, flabby' (O.Ir. *mlāith blāith* 'soft, tender' perhaps with  $\bar{l}$ , I § 306 p. 243). Skr. opt. *mā-ya-t* 'commemoret' 3<sup>rd</sup> pl. *mā-y-ur* from  $\sqrt{\text{men-}}$  'think', cp. Gr. Dor. perf.  $\mu\acute{\epsilon}\mu\nu\acute{\alpha}\tau\alpha\iota$ . Skr. *dhy-ā-ti* beside *dhyā-ya-ti* 'thinks of' (perf. *da-dhyāu*) beside *ā-dī-dhē-t* § 537 p. 97, cp. Gr.  $\sigma\acute{\alpha}\mu\alpha$   $\sigma\eta\mu\alpha$  = Skr. *dhy-ā-man-* II § 117 p. 370.<sup>1)</sup>

We subjoin a few more of the forms with *-ā-* whose suffix may be either Idg. *-ā-* or Idg. *-ē-* or *-ō-*: *ghr-ā-ti* 'smells' (perf. *ja-ghrāu* partic. *ghrā-tā-s*) beside *jī-ghar-ti* Class III (§ 540 p. 100); *dr-ā-ti* 'sleeps' (*da-drāu drā-ṇa-s*) beside Gr.  $\delta\alpha\rho\theta\acute{\alpha}\nu\omega$  Lat. *dor-miō* (cp. the Author, M. U., I 43); *dhm-ā-nt-* 'blowing' (*da-dhmāu dhmā-tā-s*) beside *dhām-a-ti* Class II A; *khy-ā-ti* 'looks, seems, makes known' (*ca-khyāu khyā-tā-s* beside *ā-khy-a-t* Class II B (see footnote)).

Remark. Denominatives from *ā-*stems of the later stratum in Aryan form the present in *-ā-ya-ti*, not *-ā-ti*, see § 766. Forms like *mālā-ti* 'he is like a wreath' (*mālā-*) are an artificial product of a late period.

§ 581. Armenian. *mna-m* 'I remain, await' 1<sup>st</sup> pl. *mna-mē* (aor. *mna-çi*), from the root of Gr.  $\mu\acute{\epsilon}\nu\omega$  'I remain', and probably connected directly with Skr. *mn-ā-* Gr.  $\mu\nu\acute{\alpha}$ - (§ 580). *kea-m* 'I live' ground-form *\*gi-ā-mi* (Bartholomae, Stud. Idg. Spr., II 134) or *\*gīyā-mi* (cp. Skr. *jīvā-tu-ṣ* 'life', beside Skr. *jīva-ti* 'lives' Lat. *vīvō*, which was derived from

1) Fick, Wtb. I<sup>4</sup> 32, connects  $\sigma\acute{\alpha}\mu\alpha$  with Skr. *khyā-ti*, for which see below.

✓ *gei-* by the suffix *-μο-*, but was regarded very early as a verb of Class II; cp. § 488 p. 47). *orca-m* 'I break wind, belch' for \**oruc-a-m*, cp. O.C.Sl. *ryga-jā* 'ructo'.

Denominatives with *-ā-* of the newer stratum are inflected just as these are; as *jana-m* 'I take pains, strive' 1<sup>st</sup> pl. *jana-mē* (*jan* 'pains, excitement, diligence'), *olba-m* 'I bewail' 1<sup>st</sup> pl. *olba-mē* (*olb* 'lament'). *xroxta-m* 'I am haughty, defiant' 1<sup>st</sup> pl. *xroxta-mē* (*xroxt* 'haughty, defiant').

§ 582. Greek. *ἔδρα-ν* 'I ran' 1<sup>st</sup> pl. *ἔδρα-μεν* 3<sup>rd</sup> pl. *ἔδρα-ν*: Skr. *drā-ti*, see § 579 p. 121. *ἔτλη-ν* Dor. *ἔτλα-ν* 'I endured' 1<sup>st</sup> pl. *ἔτλη-μεν* 3<sup>rd</sup> pl. *ἔτλα-ν*, imper. *τλή-θι*, from ✓ *tel-* (*τολ-μή*, *τελάσσαι*). Hom. *πλή-το* 'drew near' (cp. Dor. *ἄ-πλά-το-ς* *πλά-τιο-ν*), beside *πελάζω* 'I bring near'. *ἔβη-ν* Dor. *ἔ-βā-ν* 'I went': Skr. *á-gā-t*, see § 579 p. 121. Att. *ἔ-γηρά-ν* 'I grew old' inf. *γηράναι* from pres. *γηράσκω*. Epidaur. *ἔξ-ερρά-ν*: Lith. *pa-srūvo* 'I flowed'. Hesych. *ἐφθιά*: *ἀπέθανεν* (cod. *ἐφθιά*). Other forms of the same kind collected by Fick in the Gött. Gel. Anz. for 1881, pp. 1430 ff., and Bartholomae, Stud. Idg. Spr., II 128 f.

Denominatives with *-ā-* belonging to the newer stratum were conjugated in this Class in the Aeolic dialect; e. g. pl. *τίμα-μεν* *τίμα-τε* (but att. *τιμῶμεν* *τιμᾶτε*). The 1<sup>st</sup> sing. in *-αιμι* is a re-formation in place of *-ā-μι*, and *-οιμι* instead of *-ω-μι*. Cp. §§ 589, 775.

Forms passing from Class I to Class X: *ἔ-στη-μεν* instead of \**ἔ-στᾶ-μεν*, *ἔ-φθη-μεν* instead of \**ἔ-φθᾶ-μεν* (but the middle keeps *φθᾶ-*, as *φθᾶ-μενο-ς*). See § 495 p. 55.

Remark. Hom. *πλήντο* instead of \**πλᾶντο* following *πλήμην* etc., so *ἄνηται* *ἐμπλήντο* instead of \**ἄνενται* \**πλᾶντο*. Similarly opt. *ἔμ-πλήντο* and *μεμνήμην* *κεκλήμην*, see § 944. But some are regular, aot. *ἄεισι* *ἄεντες*; *δράντες* (on *ἔδρα-ν* *ἔγνω* see § 1020. 2). Compare I § 611 Rem. p. 462.

§ 583. Italic. The 1<sup>st</sup> sing. pres. in \**-ā-mi* is lost; in its place Latin had always \**-ā-iō*, which became *-ō*. Lat. *trāns* Umbr. *traf trahaf*, Lat. *in-trā-s* *-trā-mus*: Skr. *trā-ti*; Lat. 1<sup>st</sup> sing. *in-trō* beside Skr. *trā-ya-tē*, see § 579 p. 121. Lat.

*fl-ā-s fl-ā-mus*, cp. O.H.G. *blāu* 'I blow' for \**bhl-ē-īð* and Gr. *q.λ-ύω* 'I abound'. Lat. *n-ā-s n-ā-mus*: Skr. *sn-ā-ti* 'washes, bathes', see § 579 p. 121. Ital. \**fā-* for \**fū-ā-* from  $\sqrt{bhey-}$  'become, be', pret. \**fā-m*: Lat. *amā-bā-s -bā-mus*, Osc. *fu-fans* 'erant' (§ 899), cp. Lat. conj. *fu-ā-s*: O.Ir. *bā ba* etc. (§ 579 p. 121). Lat. *hi-ā-s hi-ā-mus*, 1<sup>st</sup> sing. *hiō* = Lith. *žiō-ju* 'open the mouth', cp. Lat. *hī-scō*, O.H.G. *gi-nō-m gei-nō-m* 'I gape'. Lat. *inquam* for \**en-sq-ā-m* injunctive,  $\sqrt{seq-}$  'say', cp. *in-qui-t in-qui-nt* (Class XXVI § 717) Gr. *ἐν-σπ-ε* (Class II B) *ἐν-σπ-ή-σω*.

*d-ā-* from  $\sqrt{dō-}$  'give' is found not only as a conjunctive (Lat. *ad-dā-s*, Osc. *da-dad* 'reddat'), but as indicative too, Lat. *dās dat*. The last two are doubtless injunctive forms (*dat* instead of \**dā-d*), and *d-ā-s*: *ad-dā-s* = *-bā-s*: *fuā-s*, *tulā-s*: Gr. *ἐ-τλā-ς*.

*era-m erā-s* is to *es-t* what *ea-m* (used for conj.) is to *i-t*. The use of the injunctive \**fū-ā-* = Lat. *-ba-m* for the imperfect certainly had something to do with the use of the injunctive *erā-* as imperfect. Some scholars (the latest is Bartholomae, Stud. Idg. Spr. II 187 f.) connect *eram* with Ion. *ἐῆν ἔησθα*; *ἦην* would be the augmented form; for another possible explanation see § 858. 2.

Other Verbs belonging to this class are: Lat. *juvā-s* (partic. *-jūtu-s* perf. *jūvī*) for \**djugu-ā-s*: Lith. *džiūgo-s* 'he broke out into rejoicing' (pres. 1<sup>st</sup> sing. *džiungū-s*); *lav-ā-s* (beside *lav-i-s*), cp. perf. *lavī*; *dom-ā-s cub-ā-s mic-ā-s ē-legāns* (beside *ē-ligere*) *sec-ā-s* (Umbr. *pru-sekatu* 'prosecato') and others, cp. perf. *domuī cubuī micuī secuī*. Doubtless we should also place here certain stems which have *-ā-* all through the verb, as *arā-s* perf. *arāvī* partic. *arātu-s*, cp. Gr. *ἀράω* 'I plough' (Hom. 3<sup>rd</sup> pl. *ἀρόωσι* Heracl. *ἀράσσοντι*, Sütterlin, Zur Gesch. der Verba denom. im Altgr., I 22), O.C.Sl. *ora-* 'to plough' in the aor. *ora-chŭ* partic. pret. act. *ora-vŭ* inf. *ora-ti*.

In Latin, there are a number of verbs which have the *ā*-flexion when compounded, but some other when not. Examples: *oc-cupāre*: *capiō*, *suspiciārī*: *speciō*, *prōfligāre*: *fligō*, *com-*

-pellāre : pellō, aspernārī : spernō. This difference had probably something to do with a difference of meaning; the compound as contrasted with the simple verb often had a perfect (aorist) meaning. The *a*-formation gave an aoristic meaning, and *occupāre* stands to *capiō*, much in the same relation as Gr. *μαρῆναι* to *μαίνομαι*, *prōflīgāre* to *flīgō* as *λιπῆναι* to *λείπομαι*. The indic. pres. *occupa-t* is then an aorist formation, like *lic-et* (Gr. *ἐλίπη*) beside *linquō* (§§ 590, 708), conj. *ad-venās ē-venās* (beside Osc. *kúm-bēned* 'convenit') beside *veniō*, *tag-i-t* beside *tangi-t*, and the like. This *a*-aorist seems to be as old as the *ē*-aorist: cp. Gr. Epidaur. *ἔρρεῖα* 'he flowed', Lith. *pa-srūvo* 'he flowed' *kūlo* 'he raised himself'; perhaps to this class belongs the Armenian *a*-aorist, as *cn-a-y* 'genui, natus sum' (Bartholomae, Stud. Idg. Spr., II 130, cp. § 573). Compare further § 708 Rem.

In the whole range of Italic dialects, the later group of denominatives with *-a-* went hand in hand with the present flexion of this tenth Class. Lat. *planta-s -a-mus* 1<sup>st</sup> sing. *plantō* like *in-tra-s* etc. Umbr. *furfant* 'februant' imper. *portatu* 'portato', Osc. *faamat* 'habitat' *sakarater* 'sacratur' imper. *deivatud* 'iurato'. Compare §§ 738, 777.

§ 584. Keltic. Irish has only one monosyllabic present stem of the same kind as Idg. *tr-a-*, to wit, *\*bhū-a-*. This stem is certainly attested in conjunctive and future use (cp. Lat. *fu-a-m*), as 3<sup>rd</sup> sing. *bā ba* = *\*bhū-a-t*. Whether it acted also as the preterite copula (cp. Lat. *-bam*), is doubtful, because its 3<sup>rd</sup> person singular appears after particles as *-bu -bo* (e. g. *robu robo*), which looks like original *\*bhū-t* (Gr. *ἔ-φῑ*). Most likely the 1<sup>st</sup> and 3<sup>rd</sup> sing. *bā* and 3<sup>rd</sup> pl. *batir*, which still have those forms even in Old Irish, should be derived from a preterite *\*bhū-a-*.

Then there are a few dissyllabic present stems, as O.Ir. *scarā-* 'sunder, part from' for *\*skyr-a-* (I § 298. 3 p. 237), *scar'im scar'i scar'id scarmme scarthe scar'it* for *\*scarā-mi -a-si* etc., also *no scaru* for *\*scarā-iō* like Lat. *juvō*. And



again, the same inflexion is used with the later group of denominative verbs, as *com-alnaim* 'I fill up' (§ 778). Even more clearly than in Irish we see this *ā*-flexion in the British dialects; 3<sup>rd</sup> sing. O.Brit. *-ot* (with *o* = *ā*), e. g. O.Bret. *cospitiot* 'titubat' *crihot* 'vibrat'.

**Remark.** Remarkable forms of the verb *-tau -tō* 'I am' (= Idg. *\*stā-īō*, Class XXVI § 706) are the 3<sup>rd</sup> sing. *at-tā* and the plural *-tam -tad -tat*, which may correspond to Lat. *sta-t* and *stā-mus stā-tis sta-nt*. That *at-tā* comes from *\*-stā(ī)e-t* can hardly be proved, and the unaccented *-tam -tad -tat* need not be shortened by-forms of accented *at-taam*, *ataād* *ataaith*, *at-taat*, which may be secondary re-formates. Still I do not believe that we need assume, parallel to *stā*-, an original stem *st-ā*, i. e. an extension of the root by the *ā*-suffix of this tenth class; but I think that in Italic as in Keltic there was a tendency for verbs to pass from Class XXVI into this, caused by parallel present stems like *tr-ā*- and *tr-ā-īo*-. Compare § 505 pp. 71 f., §§ 706, 716, 719.

§ 585. Germanic. No monosyllabic stems of the first stratum, without *-īo*-, are found at all; unless indeed it be represented by O.H.G. *tuō-m* from  $\sqrt{dhē}$ - (see § 507 p. 74). But the said inflexion has many representatives amongst disyllabic stems (mostly denominatives of the later stratum), cp. Goth. *mitō-s* 'thou measurest' *salbō-s* 'thou anointest', *mitō-p* *salbō-p*, *-ō-m* *-ō-p*, *-ō-nd*, O.H.G. *borō-m* *-ō-s* and so forth (cp. §§ 739, 781).

§ 586. Balto-Slavonic. Monosyllabic stems are declined in Class XXVIII; as Lith. *ži-ō-ju* 'hio' *žiō-ji* *-j(a)* *-ja-me* *-ja-te*, O.C.Sl. *tr-a-jā* 'I last, endure' *tra-je-ši* *-je-tū* *-je-mū* *-je-te* *-jatū* (cp. § 740). But imperatives like Lith. *žiō-k* = Lat. *hia* (§ 957) should be classed here.

Dissyllabic stems without *-īo*- spread very widely in Baltic. To this class belong a very numerous group of preterites in *-au*, as Lith. *buvau* 'I was' *buvai buvo buvo-me buvo-te*: Lat. *-b-a-s*; *pa-sruvo* 'flowed': Gr. Epidaur. *ἐρρῶ* (§ 582 p. 123); *džiug-au-s* 'I broke out into rejoicing': Lat. *juv-ā-s* (§ 583 p. 124); *gij-au* 'I revived' (cp. Avest. *jyāiti-s* 'life' Gr. ζῆν 'lives' for *\*gi-ē-īe*-, from  $\sqrt{gei}$ -); *kil-au* 'I raised myself', *vilk-au* 'I dragged', *snig-o* 'it snowed'. With augment *ėj-au* 'I went'

(§ 480 p. 28): Lat. *eā-* for *\*eġ-ā-* as conjunctive. Also presents; as *bij-aũ-s* 'I fear', *lind-au* 'I am stowed away somewhere'.

These forms had originally secondary personal endings, *-ā-m -ā-s -ā-t* etc., like Lat. *-bam bās*. But the 1<sup>st</sup> and 2<sup>nd</sup> sing. were transformed, the ending of *suk-ù suk-i* being added to *-ā-*. See on this point § 991. 1.

In verbs like *bij-aũ-s lind-au*, *-ā-* was carried through the whole verb (fut. *bijó-siũ-s lindo-siu* etc.). Thus they were related to the *ā*-preterite (*buv-aũ* beside fut. *bú-siu*, *džiug-aũ-s* beside fut. *džiūk-siũ-s*), as Lat. *ar-ā-* to *juv-ā-* (§ 583 pp. 124 f.).

O.C.Sl. has only one present of this sort, *im-a-mĭ* 'I have' *im-a-ši -a-tŭ -a-mŭ -a-te*; parallel stem *im-ē-* in partic. pret. act. *imē-vŭ* etc., cp. Lith. pret. 3<sup>rd</sup> sing. *ĕm-ē*.

Amongst the later Lithuanian denominatives those in *-au* with inf. *-yti*, as *jũ'stau* 'I gird' (*jũ'styti*) from *jũ'sta* 'girdle', see § 782. 4. Another group of later denominatives from stems in *-ā-* has *-o-ju -o-ti*; e. g. *dovanó-ju* 'I present', inf. *dovanó-ti*, from *dovanà*, see §§ 769, 783.

§ 587. Root + *-ē-* or *-ō-*.

Pr. Idg. *\*gl-ē-ti* from  $\sqrt{\text{gel-}}$  'fall' (cp. Gr. *βέλ-ος* 'missile' *βολ-ή* 'throw'): Skr. *gl-ā-ti* 'falls off, loses strength' (*glā-ya-ti*), Gr. *ἐ-βλη-ν* 'I received a blow, I was struck', 1<sup>st</sup> pl. *ἐ-βλη-μεν* mid. *ἐ-βλη-το*, opt. *βλείην βλείμεν*. *\*pl-ē-* *\*pl-ō-* from  $\sqrt{\text{pel-}}$  'fill' (Goth. *fil-u* 'much' etc.): Skr. 2<sup>nd</sup> sing. hortative *prā-si* aor. *á-prā-t*, Gr. *πλη-το* *πλη-ντο* (§ 582 Rem. p. 123), Lat. *im-plē-s -plē-mus -plē-tur* (1<sup>st</sup> sing. *plēō* for *\*plē-ġō*); parallel stem *\*pġl-ē-* in Lith. *pýlē* 'he shed' instead of *\*pilé* (§ 593); *\*pl-ō-* in Lat. *plōrāre* Goth. *flō-du-s* 'flood', and doubtless in Gr. *ἐπ-έπλων* 'I sailed over' pres. *πλώ-ω* partic. *πλω-τό-ς*. *\*(s)n-ē-* *\*(s)n-ō-* 'weave, spin, sew' (*\*(s)n-ē-* in O.C.Sl. *ni-tŭ* 'thread'? cp. Per Persson, Stud. Lehr. Wurzelersw., 64): Gr. 3<sup>rd</sup> sing. *ἐ-ννη* Herodian II 507 22 L. (*νέω* from *\*snē-ġō*), Lat. *nē-s nē-mus* (cp. O.H.G. *nāu* 'I sew' for *\*(s)nē-ġō*); *\*sn-ō-* in O.Ir. *snā-the* 'thread' O.H.G. *snuo-r* 'cord, band'; Skr. *snā-van-* Avest. *snā-var*

'band, sinew' may be derived from \**sn-ē-* on the strength of Gr. *νεῦρο-ν* 'sinew' (for \*(*σ*)*νη-φ-ρο-ν*). \**gn-ē-* \**gn-ō-* 'learn, know' from √*gen-* (Avest. *ā-zainti-š* 'information' Lith. *pa-žinti-s* 'knowing, knowledge', Skr. 2<sup>nd</sup> sing. imper. *jñ-a* Class II B): Skr. opt. *jñā-yā-t* and *jñēyā-t* (§ 940), Gr. *ἐ-γνώ-ν* *ἐ-γνώ-μεν* opt. *γνοῖ-μεν*, cp. O.H.G. *knāu* for \**gnē-īō*, O.C.Sl. *znajetŭ* for \**gnō-īe*.<sup>1)</sup> \**mṇ-ē-* from √*men-* 'think' (Gr. *μέν-ος* 'mind' etc.): Gr. *ἐ-μάνη* *ἐ-μάνη-μεν*, Lith. *min-ē* *min-ē-me*, cp. Goth. 3<sup>rd</sup> sing. *munaiþ* for \**mun-ē-ī-đi* (§§ 708, 739); also \**mn-ā-* § 580 p. 122. \**ī-ē-* \**ī-ō-* 'go' from √*ei-* 'go' (Gr. *εἰ-μι*): Skr. *yā-ti* *yā-mās* mid. *yā-mahē*, Goth. 2<sup>nd</sup> sing. *iddjē-s* (§ 478 p. 26), cp. Goth. *j-ēr* 'year' and Gr. *ὥ-ρος* 'year' *ὥ-ρᾱ* 'season' O.C.Sl. *ja-rŭ* 'spring'; Lith. *jó-ju* 'I ride' and Lat. *jā-nu-s* *janua* doubtless from \**ī-ā-*, from the same √*ei-* (cp. Lat. conj. *e-ā-s*). \**bḥu-ē-* \**bḥu-ō-* from √*bḥeu-* 'become, be' (Skr. *bhāv-a-ti*): Gr. *ἐ-φύη* *ἐ-φύη-μεν*, O.C.Sl. 2<sup>nd</sup> and 3<sup>rd</sup> sing. imperf. *bě* for \**bḥuē-s-t* (beside *běchŭ* *běchomŭ* etc. like *želěchŭ* etc. beside *želě*, *dělachŭ* etc. beside *děla* and the like), the same stem in Lat. *fē-tu-s*; \**bḥu-ō-* perhaps in Gr. *φω-λεό-ς* O.Icel. *bō-l* 'resting-place, position'; cp. \**bḥu-ā-* \**bḥu-ō-* § 579 p. 121. \**u-ē-* \**u-ō-* 'to blow' (cp. the Author, M. U. I 27 ff., Per Persson, *op. cit.*, 91, 225): Skr. *vā-ti* pl. *vā-nti* (*vā-ya-ti*), Gr. *ἄη-σι* mid. *ἄη-ται*, Lat. *ventu-s* Goth. *vind-s* 'wind' for \**uē-nt-o-* like Gr. *ἄ-εντ-* for \**āFη-ντ-* (I § 612 p. 462, § 614 p. 464), cp. Goth. *vaia* for \**uē-īō* O.C.Sl. *vě-je-tŭ*; \**uō-* in Gr. *ἄω-το-ς* 'down, piece of wool' (Goth. perf. *vai-vō* is doubtless a re-formate following *sai-sō* from √*sē-* *sə-*, see §§ 883, 884). \**bhs-ē-* \**bhs-ō-* (cp. I § 552 p. 403) 'pound small, chew, grind up' beside Skr. *bā-bhas-ti* Class V (§ 556 p. 108): Skr. *psā-ti*, cp. Gr. *ψῆ* for \**ψη-ξει*; \**bhs-ō-* in Gr. *ψά-ω* *ψά-χω* 'I grind or rub to powder' *ψω-ρό-ς* 'scabby'. \**liq-ē-* from √*leiq-* 'leave' (Gr. *λείπ-ω* etc.): Gr.

1) It is true that O.H.G. *knāu* is not an unexceptionable example for \**gn-ē-*. It might be assumed that this present was formed in connexion with a perfect Goth. \**kai-knō* and on the analogy of \**sē-īō* (Goth. *saiā* O.H.G. *sāu*): *sai-sō* from √*sē-* (*sə-*).

ἐ-λίπ-η-ν -η-μεν, Lat. *lic-e-t*.<sup>1)</sup> Lat. *tac-ē-s -ē-mus*, O.H.G. *dag-ē-s* 'thou art silent'. Lat. *scat-ē-s -ē-mus*, Lith. *su-skat-ē* 'he leapt up'.

With dissyllabic stems in *-ē-*, in which the root remained a separate syllable, the *ē*-suffix does not appear in so many different parts of the verb as with monosyllabic stems. In a number of verbs, especially intransitive verbs, of the European languages, a firm connexion sprang up between present formations with the suffix *-jo-* and forms with *-ē-*, as Gr. *μαίνομαι ἐμάην* = O.C.Sl. *mīnja mīnē-ti*. See § 708.

§ 588. Aryan. Almost all the Sanskrit forms which can with any kind of certainty be placed in this class have been mentioned in § 587. Beside *yā-ti* we have Avest. *yāiti*; beside *vā-ti*, Avest. *vāiti* 3<sup>rd</sup> pl. *vā-nti*.

In this class was conjugated Ar. *pā-* 'protect', whose *-ā-*, in view of Gr. *πῶν* 'herd' (II § 104 p. 315, § 105 Rem. p. 318) seems to look like Idg. *-ō-*: 2<sup>nd</sup> sing. Skr. *pā-si*, Avest. *pā-hi*, imper. 3<sup>rd</sup> sing. Skr. *pā-tu* Avest. *pā-tū* O.Pers. *pā-tūw* 2<sup>nd</sup> sing. Skr. *pā-hi* O.Pers. *pā-dīy* 2<sup>nd</sup> pl. Skr. *pā-tā* Avest. *pā-ta*, opt. Avest. *pā-yā-ḥ*. On *πῶν ποι-μήν*, compare now Per Persson, in the work so often cited, 118.

§ 589. Greek. Of monosyllabic stems may be further mentioned (cp. § 587): *φρ-η-* 'bring' from  $\sqrt{\text{bher-}}$  (*φέρ-ω*): *ἐκ-φρ-η-ται* 'is let out' partic. *ἐπ-εισ-φρεῖς* infin. *εἰσ-φρῆναι* (forms like imper. *φρέε* come by analogy of *ἴημι* and the like, see the Author, Fleckeisen's Jahrb. 1880, 217 ff.). *χρ-η-* 'wish, desire' beside Skr. *hár-ya-ti* 'desires': 2<sup>nd</sup> sing. *χρῆ-σθα*, cp. *χρῆ* for *\*χρ-η-μει* (Mekler, Beitr. zur Bildung des gr. Verb., pp. 23 f.). *κλ-η-* 'call' beside *καλέω*: Cret. part. *ἀν-κλή-μενο-ς* beside *ἀνα-καλέω* (Th. Baunack, Philologus XLIX 593 f.), cp. *όμο-κλή*

1) Bersu (Die Gutturalen, p. 154) denies that *licet* and *linguē* are connected, because *licet* has *c*, and *qu* would be expected. I conjecture that there was once a form *\*liciō* (Skr. *ric-ya-tē* Gr. *λίσσωμεν* § 707), which came regularly from *\*licu-īō* (as *farcīō* comes from *\*farcu-īō* § 715). Hence *licet*. Compare § 708.

(Hom. ὀμοκλόμεν). σβ-η- 'quench' beside σβ-εσ- (§ 643) √ *seg-*: ἔ-σβ-η-ν ἔ-σβ-η-μεν. We must also mention in this place, although it is true they are not all old formations, some forms of the 2<sup>nd</sup> sing. aor. in -θης = Skr. -*thās* (see below), as ἐ-βλή-θης beside ἔ-βλη-το, ἐ-νή-θης beside ἔ-ννη, see § 587 p. 127; ἐ-ρρή-θης beside ῥρ-η- 'speak' ῥη-τό-ν = Avest. *urvāte-m* 'determination, command' (I § 157 p. 141) from √ *uer-* (Gr. εἶρω Lat. *ver-bu-m*);<sup>1)</sup> ἐ-κλή-θης beside κλ-η- 'call' ἀν-κλή-μενο-ς κέ-κλη-μαι ὁμο-κλή (see above).

Of dissyllabic stems we have already mentioned ἐ-μάν-η-ν, ἐ-φύ-η-ν, and ἐ-λίπ-η-ν in § 587. This *ē*-formation, with intransitive meaning, became fertile (this is what the grammars call the "strong aorist"); a few further examples are ἐ-δάρ-η-ν 'I was flayed' √ *der-*, ἐ-ρρύ-η 'flowed' √ *srex-*, ἐ-τάρπ-η-ν ἐ-τάρπ-η-ν 'I enjoyed myself, was glad' √ *terp-*, ἐ-κλάν-η-ν 'I let myself be deceived, was deceived' √ *qlēp-*, ἐ-μίγ-η-ν 'I mixed myself' √ *meik-*, ἐ-ζύγ-η-ν 'had myself yoked, was joined' √ *jeug-*, ἐ-σάπ-η 'rotted' from σήπ-ω 'cause to rot', ἐξ-επλάνη-ν 'I was frightened' from pres. ἐκ-πλήττω cp. Lith. *plāk-ė* 'he struck' (pres. *plak-ù*). There was a reason why this category should become very large. Medio-passive forms of the 2<sup>nd</sup> sing. in -θης, as ἐ-δό-θης = Skr. *ā-di-thās*, ἐ-κτά-θης = Skr. *ā-kṣa-thās* (Class I), ἐ-βλ-ή-θης beside ἔ-βλη-το (Class X), ἐ-σχ-έ-θης beside ἔ-σχ-ε-το (Class II B); and forms from the *s*-aorists, as ἐρείσθης beside ἐρείσατο (ἐρείδ-ω 'I support, press against'), ἐμίχθης = \*ἐ-μεικ-σ-θης beside ἔμεικτο = \*ἐ-μεικ-σ-το μίγ-νῦ-μι 'I mix');<sup>2)</sup> — these were all regarded as being on a par with ἐλίπη-ς etc., and then, by analogy of ἐλίπη-ν ἐλίπη etc. we have ἐδόθῃ-ν ἐδόθῃ and so forth, that is, from this grew the whole series of the "weak aorist passive". Compare O.Ir. 1<sup>st</sup> sing. -*burt* by analogy of 3<sup>rd</sup> sing. -*bert*, where -*t* is the middle personal

1) ἐρρήθης εἶρέθης i. e. \**e-ur-e-thās* follows Class II B (§ 527 p. 90), op. Skr. *d-khy-a-t* beside *khy-ā-ti*, imper. *jñ-a* beside *jñ-ā-sya-ti*, etc.

2) Compare § 836, on ἐ-κορέσ-θης; and § 840 on ἐ-κρεμάσ-θης.

ending *-to* (§ 506 pp. 72 f.), and Lith. 1<sup>st</sup> sing. *eiti* by analogy of 3<sup>rd</sup> sing. *ei-t* = Gr. *ἔλ-σι* (§ 686 Rem. 2).

Dissyllabic stems with *-σ-*, are rare in Attic (cp. *ἐ-γῆρα-ν* § 582 p. 123): *ἐάλω-ν* for *\*ἡ-ἡαλω-ν* (§ 479 p. 27) 'fell a prisoner, was captured' 1<sup>st</sup> pl. *ἐάλω-μεν* partic. *ἀλόντ-*; *ἐ-βίω-ν* 'I lived' 1<sup>st</sup> pl. *ἐ-βίω-μεν*.

The Aeolic dialect inflects the whole group of newly formed denominatives in *-έω* and *-όω*, and the Causatives in *-έω* (Class XXXII) as though belonging to Class X; e. g. Lesb. *φίλη-μι* 'I love, am wont' from *φίλο-ς*, *φόρη-μι* 'I carry' (Class XXXII), *στεφάνω-μι* 'I crown' from *στέφανο-ς* (Att. *φιλῶ* for *φιλέω*, *φορῶ* for *φορέω*, *στεφανῶ* for *στεφανόω*), 2<sup>nd</sup> pl. *φίλη-τε* *στεφάνω-τε*, 3<sup>rd</sup> pl. *φίλεισι* *στεφάνοισι* for *\*-ενσι* *\*-ονσι* (I § 205 p. 172), mid. *φίλη-μαι* *στεφάνω-μαι*. This was a new formation entirely, which came naturally because other tenses than the present were alike in the two classes, for instance *ἀήσεται* : *φίλῃσεται*, *γνώ-σεται* : *στεφανώ-σεται*, and because of the old Aeolic inflexion of *α*-stems (§ 578 p. 120); for verbs in *-ημι*, another factor in the change may have been reduplicated stems like *κί-χη-μι* Class XI (§ 594), and the singular indic. pres. of verbs in *-ημι* or *-ωμι* may have been influenced by *τίθη-μι* *δίδω-μι* respectively.<sup>1)</sup> However, it must not be forgotten that *φιλέετε* *στεφανόομεν* would regularly become *φίλητε* *στεφάνωμεν* in Aeolic.

Remark. As regards *η ω* in forms like *ἄνται*, (Lesb.) *στεφάνωνται*, *ἔμ-πιῆτο* etc., see § 582 Rem. p. 123; and for the 3<sup>rd</sup> pl. act. pret. *ἔμικεν* *ἔγνω* etc. see § 1020. 2.

590. Italic. Of stems originally monosyllabic I mention a few others (cp. § 587): *fl-ē-s fl-ē-mus*, connected with O.H.G. *blāu* 'I blow' Gr. *φλ-έω φλ-ύω* 'I overflow, trickle' and doubtless with *fl-ō-s*. Compare also *spr-ē-vi spr-ē-tu-s*

1) Compare especially 2<sup>nd</sup> 3<sup>rd</sup> sing. *φίλης φίλη* like *τίθης τίθη*, variants *φίλεις φίλει*; and *στεφάνοις στεφάνοι* like *δίδοις δίδοι*. Similarly, we have *τίμαις τίμαι* like *ἰσταις ἰσται*. Then the diphthong passes to the 1<sup>st</sup> sing., giving *στεφάνοιμι τίμαιμι* (cp. *ἰσταιμι*).

from *sper-nō*; *qui-ē-scō qui-ē-vī*, connected with Avest. *šyēti-š* 'wellbeing, place of delight, home' (II § 100 p. 297) and Gr. *τε-τίη-μαι* 'I am frightened' (de Saussure, *Mém. Soc. Ling.*, VII 86 f.) beside Goth. *hwei-la* 'while, time' O.C.Sl. *po-koj-ī* 'rest'; (*g)n-ō-scō* (*g)n-ō-vī* beside Gr. *ἐ-γν-ω-ν* (§ 587 p. 128).

Dissyllabic stems, usually with intransitive meaning (cp. the Greek "passive aorist" in *-η-ν* § 589 p. 130). *lic-ē-t*, Osc. *líkitud licitud* 'liceto': Gr. *ἐ-λίνη*, § 587 p. 129. *vid-ē-s vid-ē-mus*, cp. Lith. *pa-oydē-ti* 'invidere' O.C.Sl. *vid-ē-ti* 'to see'; *videō* for *\*uid-ē-iō* like Goth. *vitái-þ* 'looks towards something, observes'; notice Umbr. *virseto* 'visum'. *sil-ē-s*; with *sileō* cp. Goth. *silái-þ* 'silet'. *rub-ē-s*, cp. O.C.Sl. *rūd-ē-ti* 'redden, blush'. *fav-ē-s*, cp. O.C.Sl. *gov-ē-ti* 'religiose vereri', *ἐνλαβεῖ-οθαι*, *venerari*, *αἰδεῖσθαι* (see Ber. *sächs. Ges. Wiss.*, 1889, p. 47); *faveō* like *govējā*. *val-ē-s*, cp. Lith. *gal-ē-ti* 'to be able' (not so Bezzenberger in his *Beitr.* XVI 256). *tac-ē-s*: O.H.G. *dag-ē-s* 'art silent'; *tac-eō* like Goth. *þahái-þ*; observe Umbr. *tasez tases tasis* 'tacitus' pl. *tasetur* 'taciti'. *hab-ē-s*, Umbr. *habe* 'habet' habetu *habitu* 'habeto': O.H.G. *hab-ē-s* (✓ *khap- khab-* or *khabh- khab-*). Further, Lat. *clu-ē-s* ✓ *kley-*; *torp-ē-s* for *\*tʰp-ē-* (I § 303 p. 241); *cand-ē-s* doubtless for *\*qʷd-ē-* from ✓ (*s*)*gend-* (Skr. *ścand-rá- cand-rá-*, *cáni-ścad-a-t*); *liqu-ē-s* and others; Osc. *loufit* 'libet, vel' (Bréal, *Mém. Soc. Ling.* IV 145 f., 404 f.) beside Lat. *lubet*, closely connected with Goth. *lubáin-s* 'hope', and, as we shall see in § 708, with Skr. pres. *lúbh-ya-ti*; Umbr. *trebeit* 'versatur' from ✓ *treb-* 'build', which doubtless comes from *\*treb-ē-ti* rather than *\*treb-ī-ti* 1<sup>st</sup> sing. *\*treb-iō* (in Class XXVI, § 715). With nasal suffix, Lat. *langu-ē-s* from ✓ *slēg-* (§ 632). On this present in *-eō* compare § 708.

In the same way are inflected a late group of denominative verbs in *-eō*, and the Causatives in *-eō* (Class XXXII), e. g. *albēō albē-s* etc. from *albu-s*, and *moneō monē-s* etc. See §§ 777, 802.

§ 591. Keltic. I know nothing that can be classed here. *do-gniu* 'I do, make, work' 3<sup>rd</sup> sing. *gniith*, inflected just like

*biu*, which comes from \**bhy-ijō* (§ 719), is therefore from \**gn-ijō* not \**gn-ē-ijō*.

§ 592. Germanic. Goth. *iddja* 'I went' *iddjē-s* (pl. *iddjēdum* following *nasidēdum*): Skr. *á-yā-m*, see § 478 p. 26, § 587 p. 128, § 886 Rem. Goth. *vind-s* O.H.G. *wint* O.Icel. *vindr* 'wind': Lat. *ventu-s* contains the participle \**μē-nt* 'blowing', see § 587 p. 128. Elsewhere, monosyllabic stems only have the *jo*-suffix (Class XXVIII), as Goth. *vaia* O.H.G. *waia* 'I blow' for \**μē-ijō*.

To this tenth class belong dissyllabic stems in *-ē-* as inflected in Old High German. *dag-ē-m* 'I am silent' *-ē-s -ē-t -ēm-ēs -ē-t -ē-nt*: Lat. *tac-ē-s* etc., *habē-m*: Lat. *hab-ē-s*, see § 590 p. 132. *dol-ē-m* 'I suffer, endure', cp. Lith. *tylė-ti* 'to be still, silent' (long *i* not original), common ground-form \**tl-ē-* from √ *tel-*. *leb-ē-m* 'I live', cp. O.C.Sl. *pri-ŕpě-ti* 'hold or cleave to' Gr. *ἀλιφῆναι* from *ἀλείφω* 'anoint, smear' (for the derived meaning compare O.Icel. *lifa* 'be left over, live'). On these O.H.G. verbs in *-ēm* and their relation to Goth. verbs in *-a-áis* (as *dagēm*: *þaha*) see § 708.

§ 593. Balto-Slavonic. O.C.Sl. *bě* 'eras, erat' for \**bhy-ē-s* \**bhy-ē-t*, see § 587 p. 128. Lith. *ent-* 'going' perhaps for \**i-ē-nt*, beside Goth. *iddj-ē-s* Skr. *y-ā-nt-*, see § 511 p. 77.

Then comes the Lith. preterite in *-ė* (3<sup>rd</sup> sing.), whose high antiquity in Baltic is vouched for by Pruss. *weddē* = Lith. *vėdė* 'he led'. *pylė*, *mīnė*, *su-skatė* were mentioned in § 587, *plākė* in § 590. Compare further *virė* from *vēr-du* 'I cook, boil', *mīrė* from *mīr-sztu* 'I die', *gimė* from *gem-ù* 'I am born', *ginė* from *gen-ù* 'I hunt, drive', *tāpė* from *tamp-ù* 'I become' (as to *ė* in the root-syllable of *vėmė* from *vemiù* 'I vomit', *gėrė* from *geriù* 'I drink' and the like, see § 894). These forms had originally secondary endings, \**-ē-m* \**-ē-s*; the 1<sup>st</sup> and 2<sup>nd</sup> sing., however, were transformed, the endings of *suk-ù* *suk-ł* being added to *-ē-*, and then *-ē-u* *-ē-i* became regularly *-iau* *-ei*, as *vedžiaù* *vedėi*, *viriaù* *vire*



(Wiedemann, Lit. Praet., 32, 184).<sup>1)</sup> Compare § 586 p. 126 on *buvaū duvaī*, and § 991. 1.

Lastly should be mentioned imperatives like *minē-k* 'think of' *pa-vyde-k* 'invade'; these answer to the Greek and Latin imperatives *μύνη-θι vidē* (§ 708).

### Class XI.

Reduplicated Root + *-ā-*, *-ē-*, *-ō-*, forming the Present Stem.

§ 594. Reduplicator in *-i* (compare Classes III and IV).

Reduplicated Root + *-ā-*. Pr. Idg. *\*gi-g-ā-ti* 'goes' (cp. § 497 Rem. p. 57, § 579 p. 121): Skr. *jīgā-ti* 2<sup>nd</sup> pl. *jīgā-ta* (partic. *jīg-at-* in Class III), Gr. *βίβη-σι* 3<sup>rd</sup> pl. Dor. *βίβα-ντι* (cp. G. Meyer, Gr. Gr.<sup>2</sup> p. 431), partic. *βιβᾶς*.

Gr. *κίγ-κρά-μι* 'I mix' imper. *ἐγ-κίρα*, beside Skr. *śr-ā-ti* Class X (§ 580 p. 122); cp. below, on *πίμ-πλη-μι*. Gr. *δί-ζη-μαι* 'I seek, strive' for *\*δι-δε-μαι* beside *δί-ζο-μαι*, Class IV B (§ 549 p. 106) and beside Skr. *á-dē-dē-t* Class III (§ 537 p. 97); *\*δα-* we infer from Aeol. *ζάττημι* (Att. *ζητέω*) and Dor. *ζάττω* from the partic. *\*δι-α-το-*.

Possibly Idg. *-ā-* is contained in Germ. *\*ti-tr-ō-mi* O.H.G. *zittarōm* 'I tremble' O.Icel. *titra* 'I tremble, shake', from *√der-* 'burst' (cp. Skr. *dar-* 'push apart, lose one's head, be frightened').

Reduplicated Root + *-ē-*. Gr. *-πί-πλη-μι* *πίμ-πλη-μι* imper. Hom. *ἐμ-πίπληθι* partic. *-πιπλεις* (Hesiod, Hippocrates) beside *πλ-ῆ-το* Class X § 587 p. 127. *-πί-πορ-μι* *πίμ-πορ-μι*

1) I hold Wiedemann's explanation of *-iau* to be correct, notwithstanding Streitberg to the contrary (Idg. Forsch., I 267). Streitberg has overlooked one fact: to wit, that the diphthong *-ēu* in these words first appeared in Baltic, and is not so old as the pre-dialect period of Balto-Slavonic.

'I kindle',  $\sqrt{\text{per-}}$ . ἔλγμι 'I am gracious' imper. Hom. ἔλγθι for \*σι-σλγ-,  $\sqrt{\text{sel-}}$ . κί-χρη-σι 'lends, borrows' Dor. κίγ-χρη-τι, beside χρ-ή and χερ-νής 'needy, poor'. τί-τρον-μι 'I bore',  $\sqrt{\text{ter-}}$  τέρ-ε-τρον; cp. O.H.G. *drāu* 'I turn' from the same stem *tr-ē-* (§ 739). The weak persons of these Greek verbs (and probably of κίγ-κρᾶ-μι too) usually follow Class III, as -πίπλα-μεν = Skr. *pi-pṛ-mās*, ἔλα-μαι τίτρα-μαι etc. (ἔλα-θι beside ἔλγ-θι, πιπλάς beside -πιπλείς); this was due to present tenses like ἴστημι ἴσταμεν; Sanskrit offers a parallel in forms of the perfect system like *pa-pr-ā pa-pr-āu* : *pa-pṛ-vās-* (§ 850). See § 542 p. 102, § 621, where too is given the origin of the nasal in the reduplicator of πίμ-πλημι κίγ-κρᾶμι etc.<sup>1)</sup>

Gr. κί-χ-η-μι 'I reach, find, catch up' 1<sup>st</sup> pl. κί-χ-η-μεν partic. κ-χῆ-μενο-ς. Origin uncertain.

O.H.G. *wi-wint* 'whirlwind' beside *wint* (§ 592 p. 133) was perhaps reduplicated first as a substantive.

Remark. Some verbs of Classes III and IV have an *-ā*-suffix in Italic in non-present tenses. Umbr. *an-dirsafust a-teṛa-fust* 'circumtulerit' for \**di-d-ā-* from  $\sqrt{\text{dō-}}$  'give' pres. Umbr. Osc. 1<sup>st</sup> sing. \**di-d-ō*; Falisc. *pipafo* 'bibam' op. Skr. 3<sup>rd</sup> pl. *pi-p-atē* Lat. *bi-b-i-t* § 539 p. 100, § 553 p. 107; Volsc. *sistatiens* 'statuerunt' from \**sistā-tens* (Osthoff, Perf. 244) beside Lat. *si-st-ō*. These *ā*-stems are identical with the *ā*-conjunctives of these verbs (Pelign. *di-d-a* 'det', Lat. *bi-b-ā-s*, *si-st-ā-s*) and are proofs of the wide range which the *ā*-suffix originally had (see § 578 pp. 118 ff.).

§ 595. Fuller Reduplication (cp. Class VII). Skr. *dāri-drā-ti* beside *dr-ā-ti* 'runs', *yāyā-varā-s* 'walking or moving about' from a presumed \**yā-yā-ti* connected with *y-ā-ti* 'goes'. Armen. *mṛ-mṛ-a-m* *mr-mṛ-a-m* 'murmuro, fremo, rugio', Lat. 2<sup>nd</sup> sing. *mur-mur-ā-s*, O.H.G. *mur-mur-ō-s* *murmulo-s* 'murmurest', beside Gr. μορμύρω for \*μορ-μυρ-ω Class XXVII (§ 730). Lat. *tin-tinn-ā-s* *tin-tin-ā-s* beside *tin-tinn-iō* Class XXVII (§ 731). Lat. *ul-ul-ā-s*, Lith. imper. *ul-ul-ó-k*

1) Is Thess. inf. ἰσ-κίχόμεν (Collitz, Samml. no. 1557) an adformate of τίχμεν, or did it come from an indic. \*κίχω (cp. περσασίμεν)?

indic. *ul-ul-ó-ju* (cp. § 735). The Lat. 1<sup>st</sup> sing., *murmurō tintinnō ululō* for *-ā-īō* (cp. Lith. *ul-ul-ó-ju*) in Class XXVIII (§ 741).

## D. CLASSES XII TO XVIII.

### NASAL PRESENT STEMS.

§ 596. Specimen types of words which belong to this section are Skr. *mṛ-nā-ti ṛ-ṇō-ti yunák-ti* with the thematic *mṛ-nā-ti ṛ-ṇó-ti yuñjā-ti*; and Skr. *kṛp-āṇa-tē*.

A few remarks are necessary on these nasal accretions, which beyond all doubt are closely connected together.

(1) Skr. *mṛ-nā-ti* : *mṛ-nā-ti mṛ-ṇ-ánti*, *ṛ-ṇó-ti* : *ṛ-ṇō-ti ṛ-ṇv-ánti*, *yuñjā-ti* : *yunák-ti yuñj-ánti* = *vidá-ti* : *vēt-ti vid-ánti*; that is, there seems to be a definite relation between thematic and non-thematic forms; the thematic stem may be derived from the other by adding the thematic vowel to its weak form. See § 491 p. 50.

(2) The suffix *-ney- -nu-* is made out of *-nā- -nə- -n-* (Skr. *mṛ-ṇā-mi* Gr. *μάρο-ρα-μαι* Skr. *mṛ-ṇ-ánti*) by adding the suffix or determinative *-ey- -u-*. This *-u-* has been discussed, § 488 pp. 44 ff.

We often find *-u-* and *-nu-* in the same root; as *\*str-u-* (Goth. *stráun-ja*) and *\*str-nu-* (Skr. *str-ṇō-ti* Gr. *στόρο-νύ-μι*), from  $\sqrt{\text{ster-}}$  'sternere'; *\*hl-u-* (Skr. *śr-ō-ṣi śr-u-dhī*) and *\*hl-nu-* (Skr. *śṛ-ṇō-ti*) from a  $\sqrt{\text{ka}^{\text{r}}\text{l-}}$ , never found except with one of these extending suffixes; *\*uel-u-* (Gr. *ἐλ-ύω ἐλ-υ-τρο-ν* Lat. *vol-vō in-volūcru-m*) and *\*uľ-nu-* *\*uľ-nu-* (Skr. *ṽṛ-ṇō-ti ūr-ṇō-ti*) from  $\sqrt{\text{uel-}}$  'turn, twist, wind'; Skr. *á-dbh-u-ta-s* 'undeceitful, pure, genuine' and *dabh-ṇō-ti* from *dabh-* 'deceive'; *\*qs-u-* (Gr. *ξ-ύω*) and *\*qs-nu-* (Skr. *kṣ-nuv-ānā-s*) from  $\sqrt{\text{qes-}}$  (II § 8 Rem. 2 p. 20); *\*pī-ṽ-* (Skr. *pī-vas-*) and *\*pi-nu-* (Skr. *pī-nv-a-ti*) from *pī-* 'swell, abound in'. The variant stems in Skr. *śr-ō-ṣi* and *śṛ-ṇō-ṣi* may be compared with those in Gr. *θρασ-ύ-ς* and Skr. *dhṛṣ-ṇú-ṣ* (1<sup>st</sup> pl. *dhṛṣ-ṇu-más*). Probably one of these parallel stems, say *\*qs-nu-*, is a contamination of the

other two, \**qs-ŋ-* (Gr. ξ-αίνω ξ-άιν-ιο-ν) and \**qs-u-*, and \**stŋ-nu-* of \**stŋ-n-* (Skr. *stŋ-ñā-ti* Lat. *ster-nō* etc.) and \**str-u-*;<sup>1)</sup> but this must not be taken to imply that the contaminated suffix -*n-u-* arose in just these roots and no others.

Non-thematic *u*-flexion is very rare except in monosyllabic stems like Skr. *śr-ō-ṣi á-śr-ō-t śr-u-dhī*, where it was dominated by the analogy of verbs with *u* in the root proper. Examples of stems other than monosyllabic are Skr. *tar-u-tē* (cp. *tāru-ṣantē taru-tar-*) beside *tār-a-ti*, Gr. ἔρ-υ-μαι (cp. ἔρ-υ-μα Skr. *var-ū-tra-m var-ū-tār-*) beside Skr. *vār-a-tē vŋ-ñō-ti* Goth. *varja*.<sup>2)</sup> No proof is forthcoming that present stems of this kind were ever a numerous or productive class. It was not until *u* was joined to *n*, that the suffix ran through any large number of forms.

Remark. Some scholars, led by de Saussure, hold that \**stŋneŋ-* is \**steru-* with an *infix* or inserted element -*ne-*. That is all very well on paper, but under what principle of language known to us it can come passes my comprehension. They refer, of course, to *yunāk-ti*, from *✓jeug- \*jug-*, as a clear instance of inserted sounds. But I cannot admit that the nasal suffix has been *inserted* here any more than in the stem which I began with. See (5) below, pp. 139 f.<sup>3)</sup>

(3) After a root with final consonant *ŋn*, *en*, and doubtless *on* are found as variants for the initial *n* of -*nā-* -*no-* -*neŋ-* -*nyō-*.

1) Compare Lat. *pōpulneu-s* = *pōpulnu-s* + *pōpuleu-s*. A large collection of such mixed forms containing formative suffixes of a similar sort, is given by Per Persson, *Wurzelerw.* pp. 153 f.

2) On Skr. *tanōti*, which the Indians analysed as *tan-ō-ti*, see §§ 639, 640. *karōti* I still hold to be a later re-formate, although Per Persson, *op. cit.* p. 149, opposes this view. See § 640.

3) Fick is keenest about these "infixes". Thus in one place he speaks of the "repetition of infixed *s*" in Greek aorists in -*σα* and Sanskrit aorists in -*siṣam* (Gött. Gel. Anz., 1881, p. 1429). Page 1460: infixion is the "oldest and most powerful agent which causes word to grow out of word". Page 1462: "Almost always, where hitherto scholars have seen suffixes, that is, defining words added to the end of another, it is far better to speak of infixes". One question I should like to ask. Where did these infixed sounds come from, and what were they before they were infixed?

For *-nā- n(ə)* take the following: Avest. 1<sup>st</sup> pl. *fry-ān-maht* beside *fri-nā-iti* 'pleases, makes inclined', *ho-ān-maht* beside *hu-nā-iti* 'excites, produces'. For *-no-*: Skr. *iṣ-āṇa-t* 'let him set in motion' cp. *iṣ-ānyā-ti* = Gr. *laíwō* for *\*iō-av-ūw* (*-yno-*), Armen. *lē-ane-m* 'I leave' (*-yno-*), Gr. *xōd-áwō* 'I honour, glorify' (*-yno-*), Goth. *ga-vakna* 'I awake' (*-yno-*, *-eno-*, or *-ono-*), Lith. *kùp-inu* 'I heap, hoard' (*-yno-*), *gab-enù* 'I bring' (*-eno-*), O.C.Sl. *vrīg-nq-ti* 'to throw' (probably *-ono-*, see § 615 Rem.)

For *-ney- -nu-*: Skr. *vānanv-at-* 'liking' for *\*uy-ny-* beside indic. *vanō-ti* for *\*uy-ney-ti* from  $\sqrt{\text{yen-}}$ : Avest. 2<sup>nd</sup> pl. *debe-naotā* for *\*db-anau-ta* (*-anau-* instead of *-anu-* from the singular) beside Skr. *dabh-nō-ti* 'hurts'; Avest. partic. mid. *zar-anu-mana-* beside opt. *zar-anaṣ-mā* and Skr. *hṛ-ñī-tē* 'growls, grumbles'. For *-nyo-*: Avest. *xw-anva-inti* 'they drive on' *xw-ēnva-p* (pr. Ar. *\*sy-anya-*) beside *hu-nao-iti hu-nā-iti*: Avest. *sp-ēnva-p* 'proficiebat' doubtless the same as O.H.G. *sp-innu* 'I spin' for *\*sp-enyō* beside *spannu* 'I stretch' for *\*spə-nyō* and beside *spanu* 'I lure, attract' for *\*spə-nō* (§ 654); O.H.G. *tr-innu* 'I separate myself from' ground-form *\*dr-enyō* beside Skr. *dṛ-ñd-ti*. Greek examples are apparently Hom. *ix-áwō* for *\*ix-avfō* beside *ix-véō-mai* and *uxáwō* for *\*u-χ-avfō*, whose ending doubtless comes from *-nyō* (see § 652), and *ξ-ένφο-ς* *ξείνο-ς* *ξένο-ς* from the root of Lat. *hos-ti-s* and Goth. *gas-t-s* (cp. the Author, Idg. Forsch., I 172 ff.).

Similar groups of suffixes, fuller and weaker, are found in other present classes. *-eno-* : *-no-* = *-eso-* : *-so-* (Class XX). *-yno-* : *-no-* = *-iō-* : *-iō-* (Class XXVI).

The only ones of these dissyllabic suffixes which were to any great extent productive were *-yno-* *-eno-* (*-ono-*). These we place in a class by themselves (Class XIV).

(4) In classes where the *n*-suffix comes after the root syllable, it is not always as described in (3), just above. The root often has attached to it some kind of determinative. Thus we see *-i-* *-ī-* (cp. § 498 pp. 61 f.), as in Skr. *r-i-ṇva-ti* Gr. Lesb. *ōq-i-vvō* beside Skr. *ṛ-ṇvā-ti* Gr. *ōq-vū-μi*; Gr. *πi-vū-*

-μῆνο-ς for \**πF-i-vv-* beside *νη-πν'-τιο-ς* Skr. *pu-nd-ti*; Skr. *bhr-i-nd-ti* (Avest. *brōi-pra-* 'axe' O.C.Sl. *bri-ti* 'shear, shave') beside Gr. *φάγ-ο-ς* Lat. *for-are*; Skr. *śr-i-nd-ti* beside *śr-tá-s*; Gr. Lesb. *κρ-i-vvω* (Lat. *dis-crī-men*) beside Lith. *skir-iū*. -s- -es- (cp. §§ 656 ff.), as Skr. *i-ś-nd-ti* *i-śā-tē* beside *i-nō-ti*; Gr. *ἐῖνδμι* (*ēivōmi*) Armen. *z-genum* common ground-form \**u-es-neu-* \**u-es-nu-* beside Lat. *ex-uō* Lith. *au-nū* (§ 639). Other examples will be mentioned anon.

(5) Most obscure of all has hitherto remained the "nasal infix", the nasal element, that is, in such words as Skr. *yundk-ti* *yuñj-más* and *yuñj-ā-ti*, and its relation to the nasal suffixes in the other Classes.

The strong form, Skr. *yunaj-* for example, has hitherto been found as a verb stem only in Aryan. Some other languages have been supposed to show traces of it, as Gr. *κυνέω* and Lat. *conquiniscō frūniscor*, which are said by some to be for \**κυνεσ-ω* and \**quenec-scō* \**frūneg-scōr*; but this in my opinion is the merest conjecture.<sup>1)</sup> If we must compare something from European languages, the most likely forms are the adjective Goth. *manag-s* O.C.Sl. *mūnogŭ* 'multus' beside Skr. *māha-tē* 'is large, generous' *maghā-m* 'fullness, riches'.

Perhaps these nasal forms are merely a developement of Class XII, by a change in the first instance of, say, \**jug-n-més* \**jug-n-té* (-n- the variant of -nə-, cp. Avest. *ver'-n-tē* and the like) to \**junəg-més* \**junəg-té*. Then, by analogy of Skr. *anāk-ti* and *añj-más* and other present forms with nasal in the root,<sup>2)</sup> we get the sing. *yundk-ti*. It should be remembered, however, that it is *a priori* impossible to say whether a in

1) See Johansson, *Deriv. Verb. Contr.* 108 f., *Akademiske afhandlinger* til prof. Bugge, 24 ff.; W. Schulze, *Quaest. Hom.* 15, 42; Fick, *Vergl. Wb.* I<sup>4</sup> 381; Kretschmer, *Kuhn's Zeitschr.* xxxi 470. In discussing *κυνέω* *ἐκυσσα* no use can be made of O.Corn. *cussin* and Mid.Cymr. *cussan* 'kiss', which are loan-words from the Germanic.

2) With *anaj-* cp. Goth. *anak-s* 'suddenly, at once' (Skr. *āñjas* 'quickly, suddenly'). Skr. 2<sup>nd</sup> 3<sup>rd</sup> sing. pret. *ānať* 1<sup>st</sup> pl. conj. *anaśāmahāi*, *vy-anaś-i* 'penetrate' may be compared with Gr. *δι-ηρεκ-ής*; (§ 569 p. 113).

Skr. *yunaj-* comes from Idg. *-a-*, *-e-*, or *-o-*. This assumed change of *\*jug-n-* to *\*junəg-* must have come about in the parent language; and the singular persons may have been made in the same period. If the forms did grow as I suggest from the Class with *-nā- -nə- -n-*, it would at once become clear why of all the forms containing this suffix in any of its three grades, none is taken from a root with final explosive or fricative (§ 598): from these roots the parent language would then show (say) *\*junəq-tai̯* = *\*jug-n-tai̯* (Skr. *yunəḱ-tē*), while others would have the nasal suffix in its proper place, and show the type of *\*ur-n-tai̯* (Avest. *ver-n-tē*).

Another view is set forth by Per Persson, Stud. Lehr. Wurz., 152 f. (cp. too Windisch, Kuhn's Zeitschr. xxi 407). He thinks that in the oldest forms which set the type for the class with Nasal Infix, the root final was a determinative, and the nasal a suffix which was added to the root before the determinative was added. Then forms with the determinative and forms with the nasal were contaminated. Thus *\*limpō* (Lith. *limpù* Skr. *limpāmi*) is a sort of combination of forms answering to Lat. *li-nō* and Lith. *li-pù*. There is nothing which makes this view impossible.

Yet another hypothesis, the latest, is offered by Osthoff, Anz. für idg. Sprach- und Alterthumskunde, I 83. He suggests that Skr. *kyṇātmī-* may be  $\sqrt{\text{kr-}}$  + present suffix *-nat-* (stronger form of *-nt-*) + personal ending *-mi*; and by analogy *riñc-mās* produced *riñác-mi*. But that there ever was a simple suffix Idg. *-net- -nt-* is, I hold, quite unproven; see § 685, Rem. 2.

(6) Nasal Present Stems are often found as bases for Nouns. Examples are: Skr. *vē-na-ti* 'longs' *vē-ná-s* 'longing', Avest. *peš-ana-iti* 'fights' beside Skr. *pft-ana-m* 'battle', Gr. *θη-άω* 'I sharpen' beside *θηγ-αο-ν* 'whetstone', Skr. *dhṛṣ-ṇō-ti* 'is bold' *dhṛṣ-ṇu-má-s* beside *dhṛṣ-ṇú-ṣ* 'bold', Skr. *pi-nva-ti* 'makes to swell' beside *-pi-nva-s* 'making to swell', O.H.G. *bannu* 'regions under ban, forbidden places' for *\*bha-myō* beside *ban*, gen. *bannes*, 'command enforced by pains and penalties', cp. Gr. *ξέρφο-ς* p. 138. Compare § 487 pp. 40 f.

We shall now discuss the classes of nasal stems one by one. Of these we distinguish seven.

### Class XII.

Root + *-nā-* *-nə-* *-n-* forming the Present Stem.

§ 597. The strong suffix was *-nā-*, the weak form before a sonant was *-n-*, before a consonant either *-nə-* (Gr. *μάρ-ναι*) or *-n-* (Avest. *ver<sup>e</sup>-n-tē*).

Sanskrit, with *-nī-* before consonants (e. g. *mṛ-ṇī-más*), stands alone. *-nī-* displaces *\*-ni-* = Idg. *-nə-* on the same principle as changes *\*śi-śi-hi* to *śi-śī-hi*, so that we have *mṛṇī-más* : *mṛnā-mi* like *śiśī-hi* : *śiśā-mi*. See § 498 pp. 61 f.

Remark. Wiedemann's view (Lit. Praet. 49) that *-nī-* changed to *-nī-* by quantitative analogy of *-nā-* I hold to be mistaken; and so also Bartholomae's, that *mṛ-ṇā-mi* : *mṛ-ṇī-más* contain a pr. Idg. ablaut, *-nā-* being for *-nāi-* (Stud. Idg. Spr., II 75 ff.).

In Avestic, before sonants, not only *-n-* but *-an-*, seemingly representing Idg. *-en-* : *fry-an-mahī*, see § 596. 3 p. 138.

The Root Syllable has always, and always had, the weak form.

§ 598. Pr. Idg. All the forms which can be proved to be Indo-Germanic come from roots with final liquid, nasal, or vowel (cp. § 596. 5 p. 139).

Skr. *mṛ-ṇā-mi* 'I grind, crush' 3<sup>rd</sup> sing. *mṛ-ṇā-ti* 1<sup>st</sup> pl. *mṛ-ṇī-más* 3<sup>rd</sup> pl. *mṛ-ṇ-ānti*, Gr. *μάρ-ναι* 'I fight', partic. Corcyr. and Att. *βαρ-νά-μενος* for *\*βρα-να-* (I § 292 p. 233); *μόρ-νά-μενος* in Hesych. is either Aeolic for *μαρ-να-* (I § 292 p. 234) or all dialects of Greek for Idg. *\*mṛ-nə-* (cp. Skr. *mūr-ṇā-s*). — With thematic vowel Skr. *mṛ-ṇā-ti*.

Gr. *πορ-νά-μεν* 'πωλείν, *πορ-νά-μεναι* 'πωλούμεναι (Hesych.) are as ambiguous as *μορνάμενος*; Att. *πέρ-νη-μι* 'I sell, transfer' with changed root-grade (cp. *περάω*), O.Ir. *re-nim* 'I give away, sell' (cp. § 604).

Skr. *jā-nā-mi* 'I learn, know' for *\*gṇ-nā-*; compare perhaps Lith. *žino* 'he knows' for *\*gṇ-nā-t* (whence *žinau žino-me* etc.



by analogy of *bij-aū-s* and the like.<sup>1)</sup> — With thematic vowel Skr. *ja-na-ti* Avest. 2<sup>nd</sup> pl. *za-na-tā*, Goth. partic. *kunnand-s* (indic. *kann*).

Skr. *li-nā-mi* 'I stick close to, cower, disappear' *vi-lināmi* 'melt, disintegrate, go to pieces', Gr. *λί-να-μαι* *τρέπομαι* Hesych., O.Ir. *le-nim* 'adhaereo' (cp. § 604), O.Icel. *li-na* 'I relax, grow soft'. — With thematic vowel Lat. *li-nō* (cp. Gr. *ἀλίσσω* 'ἀλείφω' for \**ἄλι-νλω* § 611).

Skr. *kṛi-ñā-mi* 'I buy', O.Ir. *cre-nim* 'I buy' for \**cri-na-mi* (cp. O.Ir. *crī-thid* 'fond of buying'), cp. § 604.

Often a present stem is formed both in this twelfth class and in Class XVII, particularly in Aryan; e. g. Skr. *kṣi-ñā-ti* and *kṣi-ñō-ti* 'destroys'. Cp. § 605 Rem.

The likeness of the endings in the strong singular persons and those of the corresponding stems of Classes X and XI, in *-ā*, caused a number of analogical changes. (1) *-nā* passes into the weak persons, as O.H.G. *gi-nō-mēs* beside *gi-nō-m*, following *zittarō-mēs* (cp. § 594 p. 134) and *salbō-mēs*. (2) An extension with *-iō-* by analogy of the variation *-ā* : *-ā-iō-* in Classes X and XI, as Gr. *δάμνάω* instead of *δάμνημι*, A.S. *hlinie* 'I lean' instead of *hli-nō-iō*.

§ 599. Aryan. Skr. *vṛ-ñā-ti* 'chooses' mid. *vṛ-ñi-tē*, Avest. mid. *ver'-n-tē*; — with thematic vowel Avest. 3<sup>rd</sup> sing. pret. mid. *fraor'nata* = pr. Ar. \**pra-vṛ-na-ta*. Skr. *pr-ñā-ti* 'fills';<sup>2)</sup> — with thematic vowel *pr-ñā-ti* Avest. imper. *per'-nā*. Skr. *śṛ-ñā-ti* 'breaks up, crushes, grinds, splits up'; — with thematic vowel imper. *śṛ-ṇa*; cp. O.Ir. *ara-chrinim* 'difficiscor, I decay, break up' § 604. Ar. \**šā-nā* 'to know' for \**gṣ-nā*, √ *gen-* 'know': Skr. *ja-nā-ti*, O.Pers. 3<sup>rd</sup> sing. pret. *a-da-nā*: Lith. *žino*, see § 598 p. 141. Skr. *prī-ñā-ti* 'makes glad,

1) *zinō-* may also be \**gṛn-ā-* (Class X).

2) One is tempted to identify this form with O.H.G. *folōm* 'I fill'. This is probably at least a derivative from the adj. *fol* Goth. *full-s*, like O.Ir. *com-alnaim* from *lān*, see § 760.

makes inclined', Avest. *frī-nā-ḥ*. Skr. *ji-nā-ti* 'conquers, compels', √ *gej*-. Avest. injunct. *zi-nā-ḥ* 'draws away' O.Pers. *a-dī-nā*; — with thematic vowel O.Pers. *a-dī-na-m*. Skr. *pu-nā-ti* 'purifies, clears', cp. Ir. *u-nā-d* 'to cleanse'? (Fick, Wtb. I<sup>4</sup> 483, according to Stokes). Skr. *dhu-nā-ti* moves to and fro, shakes' beside *dhu-nō-ti* *dhū-nō-ti*. Skr. *grbh-nā-ti* *grh-nā-ti* 'grasps', Avest. *ger'w-nā-iti*; — thematic Skr. *grh-na-ti*. Skr. *badh-nā-ti* 'binds' for \**bhydh*-, √ *bhendh*-.

Remark. Skr. *muṣṇā-ti* 'steals' is derived from the noun *mūṣ-* *mūṣ*- 'mouse' (II § 180 p. 485). Similar words below in § 793.

§ 600. Strong stem instead of weak. Skr. imper. 2<sup>nd</sup> sing. *grbh-nā-hi* instead of *grbh-nī-hi*, 2<sup>nd</sup> pl. *pu-nā-ta* instead of *pu-nī-tā*. Compare Skr. *ky-nō-ta* instead of *ky-nu-tā* and the like, § 641.

There was naturally a close contact between thematic and non-thematic forms in Aryan, which made it easy for words to pass from one to the other. The 1<sup>st</sup> person singular and the 3<sup>rd</sup> plural present, with other forms, and the conjunctive mood, had regularly the same form in both: compare Skr. *mṛṇāmi mṛṇānti* from both *mṛ-nā-ti* and *mṛ-nā-ti*. Thematic stems are specially common in Avestic; compare 3<sup>rd</sup> sing. mid. *ster'-na-tā* opt. *ster'-naē-ta* beside Skr. *str-nā-ti* 'strews', and 2<sup>nd</sup> sing. *hu-na-hi* beside *hu-nā-iti* 'begets'.

The Sanskrit 2<sup>nd</sup> sing. imper. active, besides *-nī-hi* (*-nā-hi*), has the ending *-āná*, found in classical Sanskrit with all roots ending in a consonant, as *grh-āná* *badh-āná*. Two explanations of these are possible. (1) *-āna* may = Idg. *-one*, which may be a thematic imperative of Class XIV, where Slavonic has *-ono-* (see §§ 615, 624). Or (2), *-āna* may be *-ā* = *-ā-* + *-na*, — *-ā-* being a weak form of the *nā*-suffix, and *-na* the same particle which we see with the 2<sup>nd</sup> pl. in *-ta-na* (beside *-ta*). The second view seems better.

Remark. Bartholomae now supports the view which analyses *-āna* into *-ā* + *na*, and identifies *-na* with *-na* in *-ta-na* *-tha-na* (Stud. Idg. Spr., II 123), and cites by way of illustration the Avestic 2<sup>nd</sup> sing. imper. *bara-nā*, a variant for the usual *bara* = Skr. *bhāra*. But he explains *gṛhā-* as derived from \**gṛbhāi-*, where I cannot follow him.

Exceptionally the root syllable has a strong grade: partic. mid. *āp-n-āna-s* like *āp-nō-mi* Class XVII, cp. opt. aor. *apēyam* and *āpas- apās-*. But *ap-* may be preposition *a* + *ap-*.

A few isolated forms in Sanskrit show a change from this class to *-iō*-stems: partic. *hṛṇā-yā-nt-* *hṛṇi-yā-māna-s* beside *a-hṛ-ṇā-t* mid. *hṛ-ṇi-tē*. With forms like Gr. *δαμνάω* (§ 598 p. 142), *hṛṇi-yā-nt-* has no very close connexion.

§ 601. Armenian. *baṛna-m* 'I raise' for *\*barj-na-m* ground-form *\*bhṛgh-nā-mi*, cp. aor. *barj-i*. *darṇa-m* 'I return' for *\*darj-na-m*, cp. aor. *darj-ay*. *bana-m* 'I open' ground-form *\*bhā-nā-mi* from *√bhā-* (p. 56 footnote), cp. aor. *ba-ḥ-i*: Gr. *φαίνω* for *\*φα-νῖω* § 611, O.H.G. *ba-nnu* § 654. *sta-na-m* 'I possess, have in my power, buy', cp. aor. *sta-ḥ-ay*: Gr. *στά-νω* 'I place' (G. Meyer, Gr. Gr.<sup>2</sup> p. 446) Lat. *dē-stinare*, O.C.Sl. *sta-na* 'I place myself'. *lua-na-m* 'I wash', cp. aor. *lua-ḥ-i*.

These are inflected like the *a*-presents *mna-m* and *jana-m* (§ 581 p. 122). But the original quantity of the *a* in *-na-* cannot be determined; and *-na-* may be Idg. *-nā-* or Idg. *-nə-*.

§ 602. Greek. *μάρ-νυ-μαι μαρ-νά-μενο-ς*, *πορ-νά-μεν πέρ-νυ-μι*, *λῖ-να-μαι* see § 598 p. 141. *δάμ-νυ-μι* 'I tame' beside *δάμα-σσειν*; for the root syllable compare *κάμ-νω* and Skr. *śam-nī-tē* beside *κάμα-το-ς* *śami-tā-s*, *ὄμ-νυ-μι* beside *ὀμό-τη-ς*. *δύ-να-μαι* 'I can' possibly connected with Lat. *dū-ru-s*; but Gortyn. *νύ-ρα-μαι* 'I can', probably belongs to some other root.<sup>1)</sup>

The *ι* of the root-syllabic is strange in the following stems. *μίρ-νυ-μι* 'I mix' beside aor. *ἐκέρουσι*. *πίλ-να-μαι* 'I draw near quickly' beside aor. *ἐπέλασα*: cp. Lat. *pellō* for *\*pel-nō*, O.Ir. *ad-ellaim* 'I go to, visit' for *-(p)el-nā-*. *κρίμ-νυ-μι* 'I hang' (wrongly written *κρήμνυμι*) beside aor. *ἐκρέμασα*. *ὀρίγ-να-μαι* 'I reach or stretch' beside *ὀρέγω*. *πίτ-νυ-μι* 'I spread' beside aor. *ἐπέτασα*; thematic *ἐ-πιτ-νο-ν* *πίτ-νω*. *σάιδ-να-μαι* 'I spread or widen,

1) Can this be connected with *νεῦρο-ν* 'sinew, tension, strength'?

disperse' beside *ἐκέδασα*. Various explanations are given: see Osthoff, M. U. II 20; Wackernagel, Kuhn's Zeitschr. xxix 126; Moulton, Am. Journ. Phil. X 284 f., and Class. Rev. III 45; Kretschmer, Kuhn's Zeitschr. xxxi 375 f.

With *-iō*-flexion: *δαμνάω*, *κρινάω*, *ὀριγνάομαι*, *πιννάω*. Compare § 598 end, p. 142.

In *δύ-να-μαι*, the nasal was not confined to the present stem: *δυνάτος ἐδυνησάμην ἐδυνήθην ἐδυνάσθην*, like *ἀγᾶτος ἀγήατος ἡγάσθην* from *ἄγα-μαι*. Compare § 643, and *τανύσσαι* (from *τα-νύ-μαι*).

§ 603. Italic. (1) We find in Latin the non-thematic inflexion of Class XIII: *ster-nō* (contrast Skr. *stṛ-ñā-ti*), *li-nō* (contrast Skr. *vi-linā-ti*), *pellō* for *\*pel-nō* (contrast Gr. *πίλ-να-μαι*), *sper-nō* (contrast O.H.G. *spor-nō-m* 'I tread, kick'), and no sound-law prevents our putting in this twelfth class *ster-ni-mus -ni-tis*, deriving them from *\*-na-mos \*-na-tes* (cp. § 505 p. 71, on *red-dimus*, and § 543 p. 103, on *se-ri-mus*).

(2) But some compounds are inflected as verbs in *-āre*. *cōn-sternāre*, beside O.H.G. *stornēm* 'attonitus sum' (§ 605) Gr. *πτέρω* 'I make shy, put in a fright'. *in-clināre*: O.Sax. *hli-nō-n* 'I lean', cp. Lett. *slī-nu* (beside *slēiju*) 'I lean on, support'. *dē-stināre*, cp. Armen. *sta-na-m* 'I possess' Gr. *στά-νω* 'I place' and *στα-νύω* (§ 601 p. 144). So too *com-pellare* from *pellere*, *aspernārī* from *spernere*. It is assumed that a similarity in the endings *-nā-s(i) -nā-t(i)*, in this class, and *-ā-s(i) -ā-t(i)* in Classes X and XI caused a current to set in the direction of the last two (cp. end of § 598). But this does not explain why only compounds were carried by it; and apparently we must not separate *pellere* : *compellare*, *spernere* : *aspernārī* from *fligere* : *profligare*, *capere* : *occupare* and others. The *-nā-* in *cōn-ster-nā-s* must therefore be kept quite distinct from *-nā-* in Skr. *ṣṭ-ñā-mi* Gr. *δάμ-νῃ-μι*. See § 583 pp. 124 f.

§ 604. Keltic. O.Ir. *re-nim* 'I give away, sell' (perf. *-rir*), *le-nim* 'adhaereo' (perf. *ro lil*), *cre-nim* 'I buy' (perf. *-ciuir*) Mod.Cymr. *prynaf*, see § 598 p. 142. *gle-nim* 'adhaereo'

(perf. *ro giuil*) Mod.Cymr. *glynaf* beside O.H.G. *chli-nu* 'I cleave, stick, smear' (Gr. *γλοι-ό-ς* 'sticky dampness' O.H.G. *chleimen* 'plasmare'). O.Ir. *be-nim* 'I strike, cut' O.Brit. *et-binam* 'lanio' Mod.Bret. *benaff* 'I cut', beside Lat. *perfringes* 'perfringas' (Festus) O.Bret. *bi-tat* 'resicaret' O.C.Sl. *bi-ti* 'to strike'. The inflexion of these presents, as Thurneysen shows (Kuhn's Zeitschr. xxxi 87), points to pr. Kelt. *\*-nā-mi -nā-si -nā-ti -nā-mesi* etc., i. e. the weak suffix *-nā-* = Idg. *-nə-* had got into the singular.

We must keep these presents distinct from O.Ir. *ara-chrinim* 'I decay, break up' (beside Skr. *śṛ-nā-ti* § 599 p. 142), *-gninim* 'I recognise' (✓ *ġen-*, cp. Skr. *ja-nā-ti* with *\*ġē-* § 598 p. 141) and *ro-chluiniur* 'I hear' (beside Avest. *sru-nao-iti* Class XVII, ✓ *kley-*), which have *īo-*-inflexion. Was there any connexion between the *-īo-* of this last named present and the old *-nu-*-inflexion? There may be the same relation between *-chrinim* and Skr. *śṛ-nā-mi* as between Gr. *φαίω* for *\*φα-ν-ιω* and Armen. *ba-na-m* (§ 611), or between Lat. *li-n-iō* (beside *li-nō*) and Skr. *vi-linā-ti* (§ 598 p. 142, § 743).

§ 605. Germanic. Here, as in Latin, we have sometimes the thematic conjugation of Class XIII, and sometimes the conjugation of Classes X and XI; see § 598 end, p. 142.

O.H.G. *spor-nō-m* 'I tread, kick' O.Icel. *spor-na* 'knock against'; thematic variant stem O.H.G. *spur-nu* and *-spirnit* conj. *-spirne* (perf. *spur-num* O.Icel. perf. *spar-n spur-nom*) like Lat. *sper-nō*. O.Sax. *mor-nō-n* 'I trouble myself, care', A.S. thematic *murne*. Explanation uncertain: O.H.G. conj. *wolle* beside Skr. *vṛ-nī-tē* 'chooses' (Kluge, Paul-Braune's Beitr., viii 515). O.H.G. *gi-nō-m* (also *gei-nō-m*) A.S. *ġinie* 'I gape'; with *-no-*, O.Icel. *ġī-n* O.C.Sl. 3<sup>rd</sup> sing. *zi-ne-tŭ*, ✓ *ġhej-*. O.Sax. *hli-nō-n* A.S. *hlinie* 'I lean, support myself': Lat. *in-clī-na-t*. O.Icel. *li-na* 'I soften': Skr. *li-nā-ti* etc., see § 598 p. 142. O.Icel. *fā-na* 'I rot, corrupt' (partic. *fū-inn* 'rotten'): thematic Lith. *pū-nu* 'I rot'.

We must add a group of West Germanic verbs in which *-kk-* *-pp-* *-tt-* are due to assimilation of the *n* of *-nā-* to an explosive root-final (I § 530 p. 388, § 534 p. 391, § 541 p. 396); as O.H.G. *lecchōm* 'I lick' ground-form *\*ligh-nā-mi*, *zocchōm* 'I pull hard, tug' ground-form *\*duk-nā-mi*, Mid.H.G. *hopfe* (Rhine-Frank. *hoppe*) 'I hop' ground-form *\*qup-nā-mi*.

Remark. Some forms of these verbs have not broken *u* and *i* in the root; as O.H.G. *zucchōm*, Mod.H.G. *zucke* beside *zocchōm*, Mid.H.G. *rupfe* beside *ropfe* (ground-form *\*rub-n-*), Mid.H.G. *stutze* 'I push, strike' (ground-form *\*stud-n-*), Mod.H.G. *nicke* (ground-form *\*knigh-n-*). I suggest as a possible explanation that there may once have been *bye-forms* with the present-suffix *-ney-* *-nu-*, as 1<sup>st</sup> pl. *\*duk-nu-mes*. Compare Goth. *kunnum* (*\*gṇ-nu-mes*) beside *uf-kunna*.

A third group of Germanic present stems is that exemplified by Goth. *þaha -áis*. Goth. *maurnái-þ* O.H.G. *mornēt* beside O.Sax. *mornōn* A.S. *murne*. O.H.G. *hlinēm* beside O.Sax. *hlinōn* A.S. *hlinie*. O.H.G. *stornēm* 'attonitus sum, inbio', beside Lat. *cōn-sternāre* § 603 p. 145. The transformation in these verbs is due to their intransitive meaning, see § 781.3. The case is different with Goth. *uf-kunnái-þ* 'recognises', as we shall see in § 646.

§ 606. Balto-Slavonic. The thematic type prevails; e. g. Lett. *gū-nu* 'I snatch' contrasted with Skr. *ju-nā-ti* 'sets in quick motion, urges', O.C.Sl. *zi-ne-tŭ* 'yawns, gapes' contrasted with O.H.G. *gi-nō-t*.

Traces of *-nā-* are perhaps left in Lith. *žino* 'he knows' ground-form *\*gṇ-nā-t*: Skr. *jā-nā-ti*, see § 598 p. 141; and in Lith. *ly-nó-ja* 'it rains slightly' inf. *ly-nó-ti* (Lett. *li-ná-t*) beside *lŷ-na* 'it rains', *kilnó-ju* 'I lift this way and that' beside Lat. *ex-cellō* for *\*celnō*, *łasz-nó-ja* 'it drizzles, trickles a little'.

Remark. *kilnó-ju* may also be quite well explained as a derivative from *kilna-s* 'high'; and this makes it doubtful whether the "diminutive frequentatives" in *-nó-ju* ought not to be estimated quite differently and classed elsewhere. But here we must bear one point in mind — this I say with a view to Leskien (Ablaut der Wurzels. im Lit., p. 174) — to wit, that Baltic denominatives often put on the appearance of primary verbs. See § 793. Thus e. g. *lynó-ja* may quite well be a primary form by analogy of which was formed *kilnó-ju* from *kilna-s*.

## Class XIII.

Root + *-no-* forming the Present Stem.

§ 607. Stems of this class seem to bear much the same general relation to Class XII as Skr. *tī-ṣṭh-a-ti* Lat. *si-st-i-t* to Gr. *ἰστη-αι*; see § 491 p. 50.

But certainly not all the stems of this class are stems of Class XII which have taken to thematic inflexion. Amongst them are many whose stem is found as a noun-stem, and was probably only a noun-stem at the first. Take, for example, Skr. *vē-na-ti* 'longs' beside *vē-nā-s* 'longing'; *paṇa-tē* 'trafficks, barter, buys' beside *paṇa-s* 'wager, bargain, loan' Lith. *peñna-s* 'gain, profit' (I § 259 p. 211); Goth. *frathna* O.Icel. *fregn* 'I ask' beside Skr. *prañā-s* 'question'. So too Class XIV (*-yno- -eno- -ono-*), closely connected with this, is denominative in its origin.

Since it is impossible to distinguish verbs like Skr. *mṛ-ñā-ti* (beside *mṛ-ñā-ti mṛ-ñ-ānti*) from those like Skr. *vē-na-ti* (from *vē-nā-s*), we shall treat them together.

Parallel variants such as Gr. *βόλομαι δήλομαι* 'I wish' (\**gl-no- : \*gel-no-*), O.H.G. *wallu* 'I heave, toss': *willu* 'roll, wallow' (\**yl-no- : \*yel-no-*) recal similar pairs in Class II, Skr. *kṛṣ-ā-ti : kārṣ-ā-ti* (§ 513 pp. 78 f.), and in Class XXVI, Goth. *vaurk-ja* : O.H.G. *wirk-(i)u* (§ 705).

§ 608. First we cite *no*-forms which occur in more than one language.

\**stṛ-no-* from *√ster-* 'sternere': Avest. 3<sup>rd</sup> sing. mid. *ster'-na-tā*, Lat. *ster-nō* (with the root-syllable in the strong grade), beside Skr. *stṛ-ñā-ti* (§ 600 p. 143). Lat. *sper-nō*, O.H.G. *spurnu* 'I tread, step, kick', *fir-spirni-t* conj. *-spirne* (see § 614), beside Skr. *sphur-ā-ti* 'quicken, throbs'. Lat. *li-nō*, Lith. *lỹ-na* 'it rains' (cp. Gr. *ἀλτρω* for \**āli-viō* § 611), beside Skr. *li-nā-ti* O.Icel. *li-na* § 598 p. 142, § 603 p. 145. A.S. *zē-ne* O.Icel. *gī-n* 'I gape, yawn' O.C.Sl. *zi-ne-tū* 'gapes, yawns' beside

O.H.G. *gi-nō-m*, see § 605 p. 146. Goth. *kei-na* O.H.G. *chē-nu* 'I bud', Lith. *gy-nu* (beside *gyjū*) 'I revive, recover'. Lat. *fallō*, O.H.G. *fallu*, both with *-ll-* for *-ln-*, possibly connected with Lith. *pū'lu* 'I fall' ground-form *\*phōlō*; according to another derivation, *fallō* is akin to Gr. *θολερός* 'troubled, impure' Goth. *dval-s* 'foolish' A.S. *dwellan* 'check, wander'; if so, the ground-form of *fallō* must be *\*dhyl-nō*.

§ 609. Aryan. To the forms cited in §§ 598 and 599, parallel to forms in Class XII, add the following: 2<sup>nd</sup> pl. *gṛ-nā-ta* beside *gṛ-nā-ti* 'calls, calls upon'; *rāṇa-ti* 'indulges himself, pleases himself' instead of *\*raṇā-ti* (cp. § 516 p. 82) ground-form *\*rṇ-né-ti* beside *ram-nā-ti*, which must be explained like *śam-nī-tē* § 602 p. 144 (cp. *ra-tā-s* for *\*rṇ-ta-s*); *d-mi-na-nta* beside *mi-nā-ti* 'lessens, hurts'; *math-na-dhvam* beside *math-nā-ti* and *mānth-a-ti* 'twirls, moves, shakes'.

Skr. *ghūrṇa-ti* 'wavers' from *ghūr-ṇa-s* 'wavering'. *vēna-ti* 'longs' from *vē-nā-s* 'longing'. *paṇa-tē* 'trades' from *paṇa-s* 'wager'. *phanati* 'leaps, hops, is in motion' from *phanā-s* 'snake's hood, nostril' (perhaps cognate with *sphurā-ti* 'quickens, throbs', and if so, with Lat. *sper-nō* O.H.G. *fir-spirnit*, see § 608 p. 148). Compare § 607 p. 148.

§ 610. Armenian. *aṛ-ne-m* 'I make', aor. *ar-ar-i* § 571 p. 113. *yaṛ-ne-m* 'I raise myself, get up', cp. Skr. *ṛ-nō-mi* Gr. *ὀρ-νῶ-μι* Class XVII § 639. *d-ne-m* 'I place', *√dhē-*. With the middle *io*-extension (§ 711), *li-ni-m* 'I become' (aor. part. *lieal*), *tani-m* 'I lead' (aor. *tar-ay*).

§ 611. Greek. *πτάρ-νo-μυι* 'I sneeze' (Aristotle) beside *πτάρ-νv-μαι*. *πῑ-νω* 'I drink', beside imper. *πῑ-θι* Aeol. *πῶ-νω* (cp. § 498 p. 61). *δάκ-νω* 'I bite' ground-form *\*dḡk-nō*, *√deḡk-* (I § 224 p. 192). *πίτ-νω* beside *πίτ-νη-μι*, § 602 p. 144. *στά-νω* 'I place', cp. Armen. *sta-na-m* Lat. *dē-stināre* O.C.Sl. *sta-nq* and *στα-νύω* § 601 p. 144, § 603 p. 145.

*λάμ-νω* 'I take pains, labour', cp. Skr. *śam-nī-tē* § 602 p. 144.



Dor. *βούλεται* Att. *βούλεται* 'I prefer, I wish' ground-form \**gl-ne-*, Dor. *δήλεται* Delph. *δείλεται* (Thess. *βέλλεται* Boeot. *βείλεται*) ground-form \**gel-ne-*, see I § 204 p. 170, § 428 b with the Remark p. 316. Hom. Dor. *τάμνω* Att. *τέμνω* 'I cut', cp. aor. *ταμ-εῖν*. Lesb. *ἀπ-έλλω* Dor. *φήλω* Hom. *εἴλω* 'I press' for \**fel-no-*.

As we find *-n-jo-* (Gr. *-aino-*) parallel to *-no-* (Gr. *-ano-*) — Class XIV, §§ 616 and 621, Class XXIX § 743 — so we have in Greek *-n-jo-* instead of *-no-*. Lesb. *κλίννω* Hom. Att. *κλίνω* 'I bend, incline' for \**kli-v-ko-*: Lat. *in-clī-nā-re* O.Sax. *hli-nō-n* Lett. *slī-nu* § 603 p. 145. *κρίνω* *κρίνω* 'I separate, choose out, decide', *σίννομαι* *σίννομαι* 'I rob' (cp. Kretschmer, Kuhn's Zeitschr. xxxi 420). *ἀλτνω* 'ἀλείφω' (aor. *ἀλῖναι*), beside Lat. *li-nō* etc., see § 598 p. 142, § 608 p. 148. *ὀτρύνω* 'I drive on' for \**o-tru-v-ko-* from *√twer-* *tur-* (Skr. *tvār-a-tē* 'hastens' O.H.G. *dwir-u* 'I turn quickly round, move', Skr. *turāṇa-s* 'hastening'); with *tru-* : *tur-* compare Skr. *hru-nā-ti* : *ju-hur-a-s* beside *hvdār-a-tē*, Avest. *caḥru-* Skr. *catur-* beside *catvar-* and the like. *φαίνω* 'I make appear, make visible, show' for \**fa-v-ko-*: Armen. *ba-na-m* O.H.G. *ba-nnu*, see § 601 p. 144. *χαίνω* 'I gape' for \**xa-v-ko-* with the aor. *ἐ-χα-νο-ν*, beside *χά-σχω* *χῆ-μη* *χῶ-ῥα*: cp. Skr. *hī-nā-s* 'deserted, lacking' *jī-hi-tē* 'yields, departs' (§ 540 p. 101). By analogy of \**kten-ko-* (*κτείνω*) beside aor. *ἐ-κτεν-σιν* (*ἐκτεῖνα*) fut. \**κτενε(σ)ω* (*κτενῶ*), there were made in pr. Greek the aorist \**ἐκλινσιν* \**ἐφανσιν* (*ἐκλῖνα* *ἐφηνα*) and the future \**κλινε(σ)ω* \**φανε(σ)ω* (*κλινῶ* *φανῶ*) from \**klin-ko-* and \**phan-ko-*, and others in the same way.

Remark. *φαίνω* shows that *κλίνω* comes from \**kli-v-ko-*. Bartholomae's doubts are unfounded (Stud. Idg. Spr., II 87 f.).

The origin of the Att. ending *-vno-* is generally uncertain, as it may come from *-νω*, *-νω*, or *σνω* (§ 655). In any case, pairs of variants such as *βύνω* *δύνω* *θύνω* beside *βίω* *δίω* *θίω* produced *ιθύνω* *ἀργύνω* beside *ιθύω* *ἀργύω*, and then the analogy went further, and we have *ἡδύνω* *ταχύνω* etc. Compare Lith. *keláunu* § 615.

§ 612. Italic. *ster-nō* *sper-nō* *li-nō* fallō see § 608 pp. 148 f.

Other verbs with a weak grade of root: *tollō* ground-form \**tļ-nō* ✓ *tel*. *si-nō*, origin obscure (cp. Osthoff, M. U. iv 133 f., Perf. 612). *dē-gūnō* for \**gus-nō*, ✓ *gēus*.

Other verbs with strong grade of root. *pellō* for \**pel-nō* (Umbr. *aṛ-peltu* 'admoveto'), beside Gr. *πῖλ-να-μαι*, see § 602 p. 144. *ex-cellō* for \**cel-nō*, cp. Lith. *kiñnó-ju* § 606 Rem. p. 147.

*tem-nō* may come from Idg. \**tem-* or \**tn̥-*.

Again *cer-nō*, which is connected with Gr. *κρίνω* and Lith. *skir-iù*, may be explained in two ways. If it contains the unextended root, it is on a level with *pellō* etc. But it may have arisen in composition from \**crinō* (I § 33 p. 34), in which case it will be analysed \**cr-i-nō* and be more closely akin to Gr. *κρίνω*.

Lastly, *pandō* is doubtful. It is connected with Osc. *patensins* (Class XIV, § 622). If it comes from \**pat-nō* (vol. II p. 161 footnote, Bartholomae, Bezz. Beitr. xvii 119), *a* must be derived from *ə* on account of Gr. *πετάσσαι*, and then the root had a weak grade. But *pandō* may belong to Class XVI; see § 632.

§ 613. Keltic. O.Ir. *ser-nim* 'sero' 3<sup>rd</sup> pl. *-sernat* (cp. Windisch, Ir. Wörterb., p. 770 b). Perhaps *sennim* (*sennaim*) 'I drive, hunt' beside O.H.G. *swimmu* for \**syem-nō* (§ 614 p. 152), cp. Mod. Cymr. *chwyfaf* 'I move, quiver' for \**syem-* (Thurneysen).

§ 614. Germanic. O.H.G. *spur-nu* 'I step, kick', and with strong-grade root syllable *fir-spirni-t* conj. *-spirne*: Lat. *sper-nō*, see § 608 p. 148. A.S. *mur-ne* 'I trouble, grieve', cp. O.Sax. *mor-nō-n*, see § 605 p. 146.<sup>1)</sup> O.H.G. *wallu*

1) Forms like O.H.G. 1<sup>st</sup> pl. *spurnamēs* infin. *spurnan* partic. *fir-spurnan* A.S. *spurnan* *murnan* are without *a*-umlaut, by analogy doubtless of the 2<sup>nd</sup> and 3<sup>rd</sup> sing. pres. and the plural of the pret. O.H.G. *spurnum* etc., cp. O.H.G. inf. *durfan* beside *darf* *durfum*, and others. But A.S. has *spornan* as well as *spurnan*. Or had the West Germanic originally forms of Class XVII beside those with *-no*? Compare *spurnum* with *kunnu-m* § 646.

'I undulate, boil', ground-form \**uġ-nō* and *willu* 'I roll' O.Icel. *vell* 'I undulate, seethe' ground-form \**uel-nō*. O.H.G. *fallu* 'I fall' see § 608 p. 149. Goth. O.H.G. *kun-nan* 'to know' partic. Goth. *kun-na-nd-s* O.H.G. *kun-na-nt-i* (indic. *kann* § 646): Skr. *jā-na-ti*, see § 598 pp. 141 f. O.H.G. *chli-nu* 'I stick, smear': O.Ir. *gle-nim*, ✓ *glei-*, see § 604 p. 146. A.S. *gī-ne* O.Icel. *gī-n* 'I gape, yawn': O.C.Sl. *zi-ne-tū*, see § 605 p. 146, § 608 p. 148, § 615 p. 153. Goth. *kei-na* (partic. *kij-an-s*) O.H.G. *chī-nu* 'I bud': Lith. *gy-nu*, see § 608 p. 149. O.H.G. *swī-nu* 'I disappear' (cp. Kretschmer, Kuhn's Zeitschr. xxxi 420), *hri-nu* 'I touch, gain', *gri-nu* 'make a face, snarl', Goth. *skei-na* 'I appear'. *sci-nu* O.H.G. *backu* Upper-G. *pacchu* 'I bake' pr. Germ. \**bakkō* for ground-form \**bhæg-nō* (I § 214 p. 181, § 534 p. 391), cp. O.H.G. *bahh-u* 'I bake' Class II *B* Gr. *φῶγ-ω* 'I roast' Class II *A* § 532 p. 94. O.H.G. *spa-nu* 'I attract, charm, drive on' (pret. *spuon*), ground-form \**spə-nō*; also *spannu* 'I stretch, widen, I am in eager excitement' ground-form \**spə-nu-ō* Class XVIII (§ 654), beside Lat. *spē-s spa-tiu-m* O.H.G. *spā-ti* 'late'.

Besides O.H.G. *fir-spirnit* and *willu*, other words have root syllables of the strong grade. O.H.G. *quillu* 'I spring, well up', ✓ *gel-*, O.H.G. *swillu* O.Icel. *svell* 'I swell, heave', O.H.G. *scillu* 'I resound, sound' O.Icel. *skell* 'I clatter', O.H.G. *hillu* 'I make a sound', O.H.G. *gillu* O.Icel. *gell* 'I yell, cry out'. O.H.G. *sinnu* 'I go, think' for \**sind-nō* cp. Goth. *sandja* 'I send', Mid.H.G. *zinne* 'I burn' for \**tind-nō* cp. Goth. *tandja* 'I kindle'. I suggest that we class here verbs with *-mm-*, for *-mn-*, as O.H.G. *swimmu* 'I swim', cp. O.Ir. *sennim* § 613. Goth. *frath-na* 'I ask' (perf. *frāh frēhum* partic. *frathans*) O.Icel. *freg-n* (*frā frāgum fregenn*) A.S. *friz-ne* (*fræzn fruznon fruznen*) with pr. Germ. variation of *χ* and *ʒ* (I §§ 529, 530 pp. 384 ff.), which was levelled down in different ways by different dialects: cp. Skr. *praś-nā-s* 'question' ✓ *prek-* (§ 607 p. 148).

§ 615. Balto-Slavonic. Here this class is more creative than anywhere else.

Lith. *gy-nu* 'I revive, recover': Goth. *kei-na*, see § 608 p. 149. Lith. *lỹ-na* 'it rains': Lat. *li-nō* (*ibid*). O.C.Sl. *zi-ne-tũ* 'gapes, yawns': A.S. *zī-ne* (*ibid*). Lett. *slī-nu* 'I lean upon, support': cp. Gr. Lesb. *κλί-νω* O.Sax. *hli-nō-n* Lat. *in-clīnāre* (§ 603 p. 145, § 611 p. 150); Lett. *st-nu* 'I bind': cp. Skr. *si-ñā-ti* 'binds, surrounds' ✓ *sañ-*; in the two Lettic verbs *i* doubtless comes from the infinitive (*slī-t*, *si-t*). Lith. *ry-nũ* 'I swallow, devour'; O.C.Sl. *ri-ne-tũ* 'knocks' *rinetũ se* 'starts' (cp. *na-rojĩ* 'impetus'). Lith. *ei-nũ* 'I go': a comparison with Lat. *prōd-inunt* is unsafe (see § 1022). O.C.Sl. *si-ne-tu* 'shines', *mi-ne-tũ* 'goes by'.

Lith. *pũ-nu* (beside *pũv-ũ*) 'I make rotten' cp. O.Icel. *fũ-na* 'I rot', § 605 p. 146. Lett. *gũ-nu* 'I snatch' Lith. *gáu-nu* 'I get' (-*áu-* from *gáu-ti*, no doubt): cp. Skr. *ju-nā-ti* 'sets in quick motion, drives on, presses'. Lith. *klũ-nu* (beside *klũv-ũ*) 'I hook on to, remain hanging', *griũ-nũ* (beside *griũv-ũ*) 'I knock down', *žũ-nũ* (beside *žũv-u*) 'I come to grief', Lett. *schũ-nu* (beside Lith. *siũv-ũ*) 'I sew' O.C.Sl. *pli-ne-tũ* 'spews' for \**plji-* \**pljy-* \**spiũ-* (I § 60 p. 47), and *plju-ne-tũ* like Lith. *spiũ-nu* Lett. *splau-nu*. Lith. *au-nũ* Lett. *áu-nu* 'put covering on the feet' ✓ *ey-*, Lith. *ráu-nu* Lett. *ráu-nu* 'pull, tear, snatch out' (beside Lith. Lett. *ráu-ju*) ✓ *rey-*, and others (see Bielenstein, Lett. Spr. I 355).

The analogy of *ráu-nu*: infin. *ráu-ti* etc. produced Lith. denominative re-formations like *keláunu* instead of *keláuju* beside the inf. *keláuti* 'to travel' (from *kēla-s* *kēle-s* 'way'), *karaláunu* instead of *karaláuju* beside infin. *karaláuti* 'to be king' (from *karāla-s* 'king'). Compare Gr. *ιθίω* § 611 p. 150.

Slavonic gives a large number of *no*-presents from verbs with other finals than *-i* and *-u*; *planetũ* 'blazes up' for \**pol-ne-tũ*, *po-mę-ne-tũ* 'thinks upon', *vrīg-ne-tũ* 'throws' (✓ *uer-g-*), *mlūk-ne-tũ* 'grows dumb', *za-klenetũ* 'shuts' for \**klep-ne-tũ*, *būnetũ* 'awakes' for \**būd-ne-tũ*, *dvig-ne-tũ* 'moves', *sūch-ne-tũ* 'dries' (intr.). Also from one root in *-ā*: *sta-ne-tũ* 'places itself', akin to Pruss. *stānintei*, adverb of the pres. participle, cp. Armen. *sta-na-m* Gr. *στά-νω* Lat. *dē-stināre* § 611 p. 149.

In Slavonic the *no*-suffix is not confined to the present stem; it appears elsewhere in the system of the verb, but then in the peculiar shape *-nq-*. Examples are aor. *mi-nq-chŭ* partic. pres. *mi-nq-vŭ* infin. *mi-nq-ti* sup. *mi-nq-tŭ* from *mi-nq*. *-nq-* is regular only in the infinitive and supine (except *sta-ti* from *sta-nq*).

Remark. The following I think is not improbably the history of *-nq-*. Slavonic once had verbs in *\*-onq* (1<sup>st</sup> sing. pres.), and their aorist ended in *-on-sŭ* *-qsŭ* and their infinitive in *-on-ti* *-q/ti*, parallel to Lith. *gyvenù* 'I dwell' (fut. *-ę-siu* infin. *-ėn-ti*) *kùpinu* 'I heap' (fut. *-į-siu* infin. *-in-ti*), see § 624. Now in the present, *-no-* levelled out *-ono-*, which was only used with consonantal roots; but *-ono-* remained everywhere except in the present. Hence a compromise: an infinitive *\*vrĭgqti*, for instance, would be transformed by analogy of *vrĭgnq* *vrĭgneši* etc., and become *vrĭgnqti*. Afterwards *-nq-* was extended to verbs from roots ending in a vowel, such as *mi-nq*, and only *sta-nq* kept clear of this change (infin. *sta-ti*). Compare with this § 624 at end, and Wiedemann, Arch. Slav. Phil. x 653 ff.

Lithuanian has no present stems with the suffix *-no-* from roots with a final explosive or fricative; instead of these the language has forms of Class XVI, such as *bundù* as against *bŭnq* in Old Church Slavonic. But there are a few in Lettic, all of them however with an interior nasal, which in most cases certainly belongs to the present suffix and not to the root: *brĭnu* 'I wade' for *\*brĭd-nu* *\*brend-nu* beside Lith. *brendù* and *bredù* (*bridaŭ brĭsti*), *rŭnu* 'I find' for *\*rŭd-nu* beside *rŭdu* = Lith. *randù* (*radaŭ rŕsti*), *mĭ/-nu* 'mingo' for *\*menz-nu* beside Lett. *mĕžŭ* (*✓meĭgh-*), *lĭnu* 'I crawl' for *lĭd-nu* beside *lĭdu* = Lett. *lendù* (*lindaŭ lĭsti*). The origin of this kind is obvious; the class with a nasal infix (Class XVI) has been contaminated with the *-no*-class, like O.C.Sl. *seg-nq* from *✓seg-* etc. (§ 636), and like Gr. *λμπάνω* from *✓leĭg-* etc. (§ 631).

#### Class XIV.

Root + *-yno-* *-eno-* *-ono-* forming the Present Stem.

§ 616. It is quite clear that this class is derived from nouns; see § 487 p. 41, § 596. 6 p. 140, and below. It is note-

worthy that the *n*-suffix is often extended by *-io-*; as Skr. *iṣaṇ-yā-ti* beside (Ved.) *iṣaṇa-t*, Gr. *ὀλισθαίνω* beside *ὀλισθάνω*, O.H.G. *giwahann(i)u* 'I recount'. See §§ 618 and 743. This is the same formation as Skr. *viithuryā-ti* from *viithurá-s* 'staggering, shaking', Gr. *αἰόλλω* from *αἰόλο-ς*, see § 770.

§ 617. Along with *-yno-* *-eno-* we find *-yñā-* *-enā-*, inflected in the same way as denominatives from *ā*-stems. To illustrate, take: Skr. *pṛtānā-yā-nti* 'fighting' beside Avest. *pešana-iti* Skr. *pṛtan-yā-ti* beside Skr. *pṛtana-m pṛtana-* 'fight', Skr. *bhandanā-yā-ti* 'shouts, cheers' beside *bhandāna-s* 'shouting' *bhandāna-* 'shout'; Gr. *ἐρῶκανάω* beside *ἐρῶκάνω* 'I hold back, bar, stem' (cp. *θηγάνω* 'I sharpen, whet' beside *θήγανον* *θήγανη* 'whetstone', and *δαπανάω* 'I spend' beside *δάπανο-ς* 'extravagant' *δαπάνη* 'expense'); Lat. *runcināre* (cp. *runcina* 'plane') *coquināre cārināre farcināre*; O.Icel. *vakna* 'I awake' pret. *vakna-ða*, Goth. pret. *ga-vaknō-da* beside pres. *ga-vakna*; Lett. *stiprinó-ju* 'I strengthen' infin. *stiprinó-ti* beside *stiprinu* (infin. *stiprin-ti*), *gabenó-ju* 'I bring together' (infin. *gabenó-ti*) beside *gabenū* (infin. *gaben-ti*); and besides, the Lith. group of preterites, of which examples are 1<sup>st</sup> pl. *stiprino-me gabeno-me*, must be added.

Seeing how clear is the denominative character of this fourteenth class, no doubt can be felt that all these verbs are derived from feminine stems. The nearest parallel is found in the verbs which will be discussed in § 769, Skr. *priyā-yā-tē* Goth. *frijō*, O.Ir. *com-alnaim* O.H.G. *follōm*, and such like. That is to say, Skr. *bhandanā-yā-ti* stands to *bhandānā* 'shout' and *bhandāna-s* 'shouting' exactly as O.H.G. *follō-m* 'I fill' to *folla* 'fullness' and *fol* 'full', or as *wuntōm* 'I make wounded, I wound' to *wunta* 'a wound' and *wunt* 'wounded'.

Remark. The student must not suppose that I refuse to see the parallelism between *ἐρῶκανάω* : *ἐρῶκάνω* and *πιτνάω* : *πίτνω*; O.Icel. *vakna* : Goth. *ga-vakna* and O.H.G. *ginō-m* : O.Icel. *gín*; Lith. *stiprinó-ju* : *stiprinu* and *lynó-ja* : *lŷna*. See the end of § 598, and §§ 602, 605, 606. The origin of the *ā*-flexion is different in the two sorts, but *ā*-flexion in the one may well have influenced the other in different languages inde-

pendently. For instance, Greek verbs of the type of *ἰϋκνᾶω* may have been supported by the use of *πινᾶω*, or *vice versa*.

Skr. *bhandanā-yá-tē* is not to be classed with *hṛñā-yá-nt-*, a quite isolated stem; we see this from a variant *hṛñi-yá-māna-s* (§ 600 p. 144). Such forms as *\*bhandani-yá-ti* do not exist.

§ 618. I cite first forms which appear in more than one language. Here, as below with forms belonging to one language only (§§ 619 ff.), the extension with *-iō-* must be cited too (§ 743).

Lat. *cruen-tu-s* partic. of a present 3<sup>rd</sup> sing. *\*cruini-t*, Lith. *krùvinu* 'I make bloody' (partic. *krùvinta-s* = *cruentu-s*) from *krù-vina-s* 'bloody'.

Armen. *aroganem* 'I sprinkle', Lith. *srāvinu* 'I make flow', common ground-form *\*srougnō*, *✓srey-* (cp. Bugge, Idg. Forsch. I 451).

Skr. injunctive *iṣana-t* 'let him set in motion, arouse, excite, quicken' and *iṣaṇ-yá-ti*, Gr. *laíw* 'quicken, hasten, warm' for *\*iō-av-íw*.

Goth. *af-lifna* 'I remain over' (pret. *-nō-da*), Lith. *lipinù* 'I cause to adhere'.

Goth. *áukna* 'I increase, grow' (pret. *-nō-da*), Lith. *uginù* 'I make grow, rear'.

Gr. *aváiw* 'I make dry, wither' for *\*avō-av-íw*, Lett. *saūsinu* 'I make dry'. Compare Alban. *gañ* 'I dry, wither', for *\*saus-niō* according to G. Meyer (Alb. Wort. 85, Alb. Stud. III 43).

Gr. *teqouíw* 'I make dry, dry up', Goth. *ga-þaúrsna* 'I grow dry, wither' (pret. *-nō-da*).

§ 619. Aryan. Avest. opt. 1<sup>st</sup> pl. *zaranaēmā* and *zaranyē-tē* (partic. *zaranimna-*) from *zar-* 'grow angry, ill', cp. partic. *zaranu-mana-* Skr. *hṛ-ñi-tē* § 596. 3 p. 138. Avest. *pešana-iti* 'fights' beside Skr. *pṛtana-m pṛtana-* Avest. *pešana* 'fight, battle' (cp. § 617 p. 155). Skr. *kṛpāṇa-tē* 'he behaves pitifully, prays' beside *kṛpaná-s* 'pitiful, miserable' *kṛpāṇa-m* 'misery'. *iṣana-t* 'let him set in motion' and *iṣaṇ-yá-ti*: Gr. *laíw*, see § 618. Only with *-iō-*: *turaṇ-yá-ti* 'hastens, goes or makes

to go quickly' from *turāṇa-s* 'hastening' (pres. *tvár-a-tē* 'hastens') cp. Gr. *ὀτρύνω* § 611 p. 150; *bhuraṇ-yá-ti* 'he is active' from *bhuraṇa-s* 'active', and others. Compare Skr. *prtaṇā-yá-ti* *bhundaṇā-yá-ti* § 617 p. 155.

There is nothing to decide whether this Aryan *-ana-* represents Idg. *-ṇno-* or *-eno-* (those who believe that Idg. *o* becomes *a* in open syllables in Aryan will say, or *-ono-* either). *iṣanyá-ti* as compared with Gr. *ἰαίνω*, so far as it goes, favours *-ṇno-*.

*-eno-* must be the suffix in Skr. *bhāna-ti* 'sounds, calls out', if this be derived from *√bha-*, and analysed *bh-ánati*; see p. 56 footnote. Perhaps the same suffix is used in some of those forms which are cited by Per Persson, *Wurzelerweiterung* pp. 70 ff., such as *dhvana-ti* 'sounds'.

§ 620. Armenian. In this language *-ano-* = Idg. *-ṇno-* is a very common present suffix. *lĕ-anem* 'I leave', aor. 3<sup>rd</sup> sing. *e-liĕ*, *√leiq-*. *gt-anem* 'I find', aor. 3<sup>rd</sup> sing. *e-git*, *√yeid-*. *tĕ-anem* 'I spew, spit', aor. 3<sup>rd</sup> sing. *e-tūĕ*. *kl-anem* 'I swallow', aor. 3<sup>rd</sup> sing. *e-kul*. *hat-anem* 'I cut off'. *tes-anem* 'I see', *√derĕ-* (I § 263 p. 214). *liz-anem* 'I lick' for *\*lēz-anem*, *√leiqh-*.

*-anem*, like Greek *-ανω*, is found in some forms which have another present suffix already. As for instance *harĉanem* 'I ask' beside aor. *harĉi*, stem *\*pr(k)-sko-* (§ 672), like Gr. *ἀλυσκάνω* beside *ἀλύ-σκω*; and very near akin to *harĉanem* is Avest. *per'sanyēiti* 'asks', if its *-s-* = Skr. *-ch-* (cp. Skr. *prachana-m* 'an asking') and not Idg. *-ĕ-* (cp. Goth. *frathna*).

*-anim* (cp. § 711) is a variant of *-anem* as Gr. *-αίνω* of *-ανω*; e. g. *meṛ-ani-m* 'I die' (aor. *meṛ-ay*) like Gr. *μαρ-αίνω* 'I make wither, decay', *mac-ani-m* 'I cleave to, hang on to, curdle', *zerc-ani-m* 'I free or save myself, run away'.

§ 621. Greek. In this language too *-ano-* = Idg. *-ṇno-* is very common.

*ἀλφ-άνω* 'I earn'. *κῡδ-άνω* 'I honour, exalt'. *κευθ-άνω* 'I hide'. *θηγ-άνω* 'I whet'. *ληθ-άνω* 'I escape notice'.



The suffix is often used to extend other present stems. For example take the following. *ἵστανώ* 'I place' beside *ἵσστημι* (Class III). *ἰσχανώ* 'I hold back' beside *ἴσχω* (Class IV). *πυνθάνομαι* 'I learn' *λιμπάνω* 'I leave' from *\*πυνθω* = Lith. *-bundū*  $\sqrt{bhe}udh-$  and *\*λιμπω* = Lat. *linguō*  $\sqrt{lei}q-$ , and so too *κλαγγάνω* 'I cry out' from *\*κλαγγω* (cp. *κλάζω* for *\*κλαγγ-ω*) = Lat. *clang-ō* beside Gr. perf. *κέκληγα* (Class XVI). *αὐξάνω* 'I increase' beside *αὐξω* *αὐκ-σω* (Class XX). *ἀλυσκάνω* 'I avoid' beside *ἀλύσκω* (Class XXII). *ἀμαρτάνω* 'I miss' beside *ἡμαρτο-ν* (Class XXIV). *δαρθάνω* 'I sleep' beside *ἔδαρθο-ν* (Class XXV).

*πιμπλάνω* *πιμπράνω*, as compared with *πίπλημι* *πίπρημι* were made on the analogy of *λιμπάνω*, and this served to keep safe the nasal in *πίμπλημι* *πίμπρημι* *κίγκρᾱμι* *κίγκρημι* (§ 542 p. 102, § 594 pp. 134 f.). Perhaps there was once a form *\*πλαν-ω*, parallel to Skr. *mṛ-nā-ti*, which on the analogy of *πίπλημι* *πίπλη-μεν* was transformed to *\*πιπλανω* (cp. the reduplicated *τε-τε-αίνω*, p. 159), and then came under the influence of verbs like *λιμπάνω*. The Greeks themselves saw a close connexion between the ending *-άνω* and a nasal in the first syllable of the word which had it, if this syllable contained a short vowel + explosive; we can see this from the transformation of Att. *\*κυχᾶνω* (for *\*κι-χαν-ω*, Hom. *κυχᾶνω*) into *κυχχάνω* (§ 652).

With *-ανάω* (see § 617 p. 155): *ἐρύκανάω* beside *ἐρυκάνω* 'I hold back, bar, stem', *δηκανάομαι* 'I welcome' beside *δηκνύμενος* (§ 639), *ισχάναω* beside *ισχάνω*, and others.

A large number have *-αίνω*. *ὀλισθαίνω* beside *ὀλισθάνω* 'I slip'. *μελαίνω* 'I darken' (beside *μελάνω*? see the commentators on Iliad 12 64), and others (cp. § 776. 6 b).

Amongst these verbs in *-αίνω* are those whose root no longer forms a separate syllable, some of which are certainly old (cp. Lett. *tv-in-ti tr-in-ti* § 624). *ξ-αίνω* 'I scratch, comb' (*ξ-άνο-ν* 'comb for carding wool') beside *ξ-ύω* and *ξ-έω* *ξ-έσ-σαι* (Class XX, § 661) from  $\sqrt{qes-}$  (II § 8 Rem. 2 p. 20). *ἐκ-φλ-αίνω* 'I bubble up' beside *φλ-ύω* Lat. *fl-ā-s* O.H.G. *bl-ā-u*

(§ 583 p. 124). *δο-αίνω* 'I do, intend to do' (*ὀλιγο-δρανέων* 'faint, weak' § 801), beside *δο-ῶ δο-ᾶ-μα* (§ 737). *ῥαίνω* 'I besprinkle' for \**σρ-αν-ιω* (*ῥανίς -ίδος* 'drop') beside *ῥ-έ(F)ει* 'flows' from *✓ser-* 'run, flow' (§ 488 p. 47) cp. *ξ-αίνω* beside *ξ-ύω*; *ἐρράδ-αται ῥάσασατε* (\**sr-d-*) belong to Class XXV (§ 695).<sup>1)</sup> *χο-αίνω* 'I touch the surface gently, stroke, soil' beside *χο-άω* 'I seize, touch' *χο-αύω* 'touch superficially, scratch' *χο-ίω* 'I anoint'. *γραίνειν· ἐσθίειν* Hesych., beside *γραίω*, which seems to be akin to Skr. *gr-asa-ti* (§ 659). *κραίνω* 'I make, complete' (*✓ger-* Skr. *kṛ-ṛā-ti*); this we should probably place here. The alternative is to analyse it \**κρα-ν-ιω*, from \**qr-n-*, and place it in § 611 (pp. 149 f.), but *κρ-όνο-ς* makes this the more likely place (see II § 67 with the Rem., p. 112). *τε-τρο-αίνω* 'I bore' (*τι-τραίνω* is also found, see Veitch Greek Verbs s. v. *τετραίνω*): Lith. *tr-inù* 'I rub', *✓ter-*.

Connected with noun stems in *-ανο-* (§ 487 pp. 40 f., § 596. 6 p. 140). *ὀλισθάνω ὀλισθαίνω*: *ὀλίσθανο-ς* 'slippery, smooth'. *θηγάνω*: *θήγανο-ν θηγάνη* 'whetstone'. *μελάνω* *μελαίνω*: *μελανο-* (*μελαν-*) 'black'. *φασγάνεται ξίφει ἀναιρεῖται* Hesych.: *φάσγανο-ν* 'cutting instrument, or sword'. *κναίνων· ἔγκνος ὤν* Hesych.: Samian *κνανο-* in *Κνανοψιῶν* (the Author, Gr. Gr.<sup>2</sup> p. 32 footnote 1). Compare *λευκαίνω* with Skr. *rōcanā-s* 'light, shining', *ἀλφάνω* with Skr. *arhaṇa-m arhaṇā* 'tribute of respect'.

§ 622. Italic. Lat. *cruen-tu-s* beside Lith. *krūvinu*, see § 618 p. 156. Osc. *patensíns* 'aperirent' for \**patenesēnt* cp. Lat. *panderent* (§§ 632, and 837. 2).

Latin verbs in *-ināre* (§ 617 p. 155): *coquināre* beside *coquere*, *cārināre* beside *cārere* etc.

§ 623. Germanic. In this class fall Inchoatives formed with an *n*-suffix (for the term inchoatives as applied to them,

1) By this correct vol. I § 488 p. 360, § 492 p. 363, § 639 p. 479.

see Egge, Amer. Journ. Phil., vii 38 ff.); as Goth. *ga-vaknan* O.Icel. *vakna* A.S. *wæcnan* 'awake'. Since in these and many other words *n* is not assimilated to the preceding consonant, it follows that there must have been a vowel between than which has suffered syncope (cp. I § 214 p. 181, Kaufmann, P.-B. Beitr. xii 504 ff.). But whether this vowel was *a*, *i*, or *u*, and the suffix accordingly Idg. *-ono-*, *-eno-*, or *-yno-*, remains a question. Furthermore, amongst form like Goth. *dis-taurna* 'I tear to pieces, crush to pieces', there may be forms with Idg. *-no-* (cp. Skr. *dīr-ṇā-s* O.H.G. *zor-n*, II § 66 p. 141), which would then have to be placed in Class XIII.

The old unextended inflexion was regular Gothic only for the present; e. g. *ga-vakna -is -iþ* etc. Elsewhere Gothic has *-nō-*, as *-vaknōda*. Old Icelandic carries *-nō-* all through the verb, as *vakna -naða*. In Old High German, on account of a certain change which will be set forth in § 781.3, most of the words in question are absorbed into the *ē*-conjugation (3<sup>rd</sup> weak conj.), as *wesanēm*.

In addition to the words already mentioned — Goth. *af-lyna*, *áuk-na* (O.Icel. *aukna*), *ga-þaursna* (O.Icel. *þorna*) — the following may be named: Goth. *ga-staurkna* 'I become stiff, dry up' O.Icel. *storkna* O.H.G. *gi-storchanēm* (beside Lith. *stregiu* 'I stiffen'). Goth. *-brukna* intr. 'I break, break to pieces' (beside *brika* 'I break'). Goth. *ga-batna* O.Icel. *batna* 'I improve myself', O.H.G. *trunkanēm* 'I get drunk'. Beside Goth. *us-lūkna* 'I open' (intr.) appears *us-lūkn-s* 'open' (adj.).

These inchoatives are sometimes derived from an adjective, in which case they run in parallel lines with the factitive group in (Goth.) *-jan*; Goth. *fullnan* O.Icel. *fullna* 'get full' beside Goth. *fulljan* O.Icel. *fylla* 'make full, fill' from Goth. *full-s* O.Icel. *full-r* 'full' (ground-form *\*pł-no-s*), Goth. *ga-qiunan* 'become alive' beside *ga-qiujan* 'make alive, quicken' from *giu-s* (gen. *qivis*) 'alive', Goth. *mikilnan* 'grow big' beside *mikiljan* 'make big' from *mikil-s* 'big'; cp. Lith. *līnksminu* from *līnksma-s* and similar forms, § 624.

O.H.G. *gi-wahannen* 'mention' pret. *gi-wuog*, A.S. *wæcnan* 'awaken' pret. *wōc*, like Gr. ἀλισταίνω (aor. ἤλιτο-ν).

§ 624. Balto-Slavonic. Baltic has *-ina* = Idg. *-ṇno-*, and *-ena-* = Idg. *-eno-*.

Lith. *krūvinu* 'I make bloody' fut. *krūvī-siu* partic. *krūvin-ta-s* = Lat. *cruen-tu-s*, *auginū* 'I make grow', *saūsinu* 'I make dry', see § 618 p. 156. *kūpinu* 'I heap up' from *kūpina-s* 'heaped up'. *trūpinu* 'I crumble, break into little bits' from *trupinỹ-s* 'crumb'. *tėkinu* 'I make run (on a grindstone), polish' from *tėkina-s* 'running' (O.C.Sl. *tečnũ*). *būdinu* 'I awake'. *lipinū* 'I make stick'. The form of the root is noticeable in *tr-inū* 'I rub' infin. *tr-in-ti* from  $\sqrt{\text{ter-}}$  (Lat. *terō*), with which compare Gr. *τε-τραίνω* 'I bore', and *tvīstu* 'I swell out' instead of *\*tv-inu*, infin. *tv-in-ti*, beside Lat. *tu-meō*; cp. Gr. *ξ-αίνω*, and its like, § 621 pp. 158 f.

This extraordinarily fertile suffix was used to derive verbs with a factitive meaning from adjectives too (as in Gothic, *fullnan* etc., § 623); e. g. *līnksminu* 'I make glad, comfort' from *līnksma-s* 'joyful', *vėninu* 'I unite' from *vėna-s* 'one', *tvīrtinu* 'I make fast' from *tvīrta-s* 'fast'; cp. Pruss. *swintina* 'he hallows' from *swints* 'holy'.

From verbs like *pū-d-inu vėl-d-inu svīl-d-inu* was extracted a suffix *-dinu*, which was largely used. See §§ 700 and 701.

Only Lithuania and Prussia have *-ina-* (*-in-*) with non-present stems. For Prussian, compare infin. *waidin-t* 'to show' partic. pret. act. *waidinn-ons* from the pres. 3<sup>rd</sup> sing. *waidinna*; *swintin-t-s* 'hallowed' from 3<sup>rd</sup> sing. pres. *swintina*. Lettic has for these parts of the verb *-ina-*, as *āudfinu* 'I bring up, raise, rear' infin. *āudfināt* in contrast with Lith. *auginū auginti* (cp. Goth. *lifna lifnōda*). Lith. has also a few words with *-inoju -inoti*, as *stiprinōju* 'I strengthen' *stiprinōti* beside *stiprinu stiprinti* (Lett. *stiprinu stiprināt*), *līnksminōju* 'I make glad' *līnksminōti* (also accented *līnksminoju*) beside *līnksminu*.

Rarer than *-ina-* is *-ena-*: Lith. *gyvenū* 'I dwell' *gyvėnti* (cp. Goth. *ga-giuna*, § 623 p. 160) and *graudenū* 'I remind, admonish'; *gabenu* 'I bring', also *gabenōju gabenōti*.

That Slavonic once possessed verbs in *\*-onq* infin. *\*-on-ti* *\*-qtī* may be assumed, as we have seen in § 615 Rem. p. 154, from such forms as *vrīg-nq-ti*. With this *-ono-* compare *zv-onŭ* 'sound' beside *zv-ŭnēti* 'sound', containing the suffix *-ŭno-* (beside *zov-q zv-a-ti* 'to call', II § 67 p. 154); further, Gr. *αὐονή* 'dryness' *αὐονον* *ξύλον ξηρόν* (Hesych., MS. *αὐονος*) beside *αὐαίνω* 'I dry up' (beside Lith. *saūsin-ti* O.C.Sl. *sŭchnq-ti*).

### Class XV.

Root + Nasal Suffix forming the Present Stem.

§ 625. Here fall such present stems as Skr. *yundāj-mi* pl. *yunāj-mās*. This class has hitherto not been certainly proved to belong to any branch but Aryan. Its origin and relation to the other nasal classes has been discussed in § 596.5 p. 139.

§ 626. Aryan.  $\sqrt{\text{leiq-}}$  'linquere': Skr. *riṇák-ti* Avest. *irinaxti* (I § 260 p. 212), Skr. 1<sup>st</sup> pl. *riñc-más* 3<sup>rd</sup> pl. *riñc-ánti* pret. 1<sup>st</sup> pers. sing. *á-rinac-am* 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-rinak*, conj. *riṇác-a-t*, opt. *riñc-yā-t*; — thematic Lat. *lingu-ō* Pruss. *po-linka* 'remains'. Skr. *bhinád-mi* 'I split', imper. *bhin(d)dhí*,  $\sqrt{\text{bhejd-}}$ ; — thematic Prakrit *bhind-a-di* Lat. *find-ō*. *pináš-mi* 'I pound, crush' 3<sup>rd</sup> pl. *piš-ánti* (cp. I footnote), injunctive 2<sup>nd</sup> and 3<sup>rd</sup> sing. *pinák*,  $\sqrt{\text{peis-}}$ ; — thematic Skr. *a-piš-a-t* Lat. *pīns-ō*. Avest. *cinah-mi* 'I give information', cp. 3<sup>rd</sup> sing. *cōiš-t* 'he informed'. Avest. *cinas-ti* 'he instructs' 1<sup>st</sup> pl. mid. conj. *cinap-ā-maidē*. Skr. *ruṇádh-mi* 'I stop, stem' 3<sup>rd</sup> sing. act. *ruṇáddhi* mid. *run(d)dhé*; — thematic *rundh-a-ti*. *vrṇāj-mi* 'I twist together' 3<sup>rd</sup> sing. mid. *vrṇak-tē*,  $\sqrt{\text{uerg-}}$ , cp. Gr. *ῥέμβομαι* § 631. *trṇédhi* 'shatters' instead of *\*trṇódhi* (for *\*trṇaš-dhi*), 3<sup>rd</sup> pl. *trh-ánti* (see I § 404.2 p. 298); — thematic *trh-a-ti*. Avest. weak form *mer'ṛak-* *mer'nc-* from *marc-* 'destroy'. 3<sup>rd</sup> pl. act. *mer'nc-inti* mid. *mer'nc-aítē* 2<sup>nd</sup> pl. mid. *mer'ṛg'-duyē*, opt. 3<sup>rd</sup> sing. *merqš-yā-p*, cp. I § 448 pp. 332 f.,

§ 473. 4 p. 350, II p. viii, I § 200 Rem. p. 168, Bartholomae, Kuhn's Zeitschr. xxix 483; — thematic Avest. *mer'nc-a-iīž*.

Remark. On Skr. *hinás-ti* 3<sup>rd</sup> pl. *hīś-anti* see § 667.

Strong stem instead of weak: Skr. 2<sup>nd</sup> pl. *yunák-ta* instead of *yurñk-tá*.

### Class XVI.

Root + Nasal Infix + Thematic Vowel forming the Present Stem.

§ 627. This class stands to the preceding in the same relation as Class II *B* to Class I, etc., see § 491 p. 50.

As the nasal often spreads from the present to the other parts of the verb, and then to nouns it is often doubtful, where a Root does not contain *i*, *u*, a liquid or a nasal, whether the nasal which we see is not really part of the root itself. It is an infix in Lat. *pre-hendō -hendī -hēnsu-s* Gr. *χρῖσσαι* 'I will seize' (for *χενδ+σ-*) *ἔ-χαδ-ο-ν* (*χῆδ-*) *χαυδάνω* Alban. *ğendem* 'I am found' Lett. *gīdu* 'I understand, conjecture' (for *\*gendu*), which is proved by Lat. *praeda* (for *\*prae-heda*) Goth. *-gīta*. For Skr. *spanda-tē* 'throbs' *spandaya-ti* *spanda-s* 'a throbbing' *pani-špadá-s* 'throbbing' (*spad-* = *\*spṛd-*) Gr. *σπερδόνῃ* 'sling' *σπαδασμός* 'throbbing, eagerness, impatience' (*\*σπῆδ-*)<sup>1)</sup> the same is proved by Gr. *σπεδ-ανός-ς* 'hasty, wild' *σποδ-ρός-ς* 'powerful'. But it sometimes happens that there are no kindred words which can decide the matter. And then again, to make the ground more slippery under our feet, roots whose nasal we have a right to say belongs to the root itself, make forms without any nasal by analogy. Thus Skr. *mamāth-a māthaya-ti* instead of *mamanth-a manthaya-ti* from *mathnd-ti mátha-ti*, where *math-* comes from *\*myth-* (§ 516 p. 82, § 852); Gr. *δήξουαι* instead of *\*δεγξουαι* from *δάξ-νω ἔ-δαξο-ν*, where *δax-* comes from *\*dḡk-* (I § 224 p. 191).

§ 628. ✓ *leip-*: Skr. *limp-á-ti* 'smears', Lith. *limp-ù* 'I cling, hold'. ✓ *peik-*: Skr. *piś-á-ti* 'adorns, decks, arms',

1) Connect Lat. *pendō pendē, pondus*?

Lat. *ping-ō*. *√* *uejd-*: Skr. *vind-á-ti* 'finds', O.Ir. *ro-finnadar* 'gets to know' (see § 633), cp. Armen. *giut* 'gain, profit' for \**yind-* (Hübschmann, Arm. Stud. I 26, 63, 75; Bugge, Idg. Forsch. I 443), Gr. *ινδ-άλλομαι* 'I show myself, appear'. *√* *seiq-seiq-* 'trickle down': Skr. *siñc-á-ti* 'pours out, wets', Goth. *sigq-a* 'I sink' (part. *sagq* following *band* etc., I § 67 Rem. 1 p. 57), Lett. *stku* 'I become exhausted, dry up, fall' (of water) for \**sink-u*, cp. Mid.H.G. *sichte* 'shallow' from \**sing-to-*. *√* *kuejt-kuejd-* 'shine' (Skr. *śvit-āná-s* Goth. *hveit-s*): Skr. *śvind-a-tē* 'is clear, or white' (gramm.), Lith. *szvint-ù* 'I become clear'. Skr. *a-piṣ-a-t* 'I crushed' (beside *pi-nāṣ-ti*, § 626), Lat. *pīns-ō*, cp. Gr. *πίσσω* *πίττω* instead of prehistoric \**πτινσ-ω* (§ 631). Skr. opt. *chind-ē-ta* beside *chi-nād-mi* 'I cut off, tear to pieces' (Class XV), Lat. *scind-ō*, cp. Gr. *σχινδ-αλμός-s* 'piece of wood split off, splinter'. Prakr. *bhind-a-dī* beside Skr. *bhinád-mi* 'I split' (§ 626), Lat. *find-ō*. *√* *sneigh-*: Lat. *ningu-i-t*, Lith. *sniñg-a* 'it snows'. *√* *leiq-*: Lat. *lingu-ō*, Pruss. *po-linka* 'remains' (Skr. *riṇák-ti* § 626), cp. Gr. *λινπ-άνω* § 631. Lat. *string-ō*, Lith. *string-u* 'I remain hanging' (pret. *strig-au*), beside Lat. *striga*, Goth. *striks* 'stroke, line' O.H.G. *strīhhu* 'I draw a line, pass along'; O.C.Sl. *strig-a* 'I shave, shear' for \**striog-* (I § 229. 4 p. 195) or for \**streig-*? Lat. *dī-stingu-ō*, Goth. *stigg-a* 'I strike, push' O.Icel. *stökk* 'I leap, push', beside Lat. *īn-stīgō* Skr. *tējatē* 'is sharp, goads on', cp. Lith. *stėngiu* § 637. Lat. *mingō* *√* *meiġh-*, cp. Lett. *mīfchu* for \**minziu* § 635. Skr. *lump-á-ti* 'breaks to pieces', Lat. *rump-ō*, *√* *reup-*. Skr. *luñc-a-ti* 'pulls, plucks' (gramm.: perf. *lu-luñc-ur* is found), Lith. *runk-ù* 'I grow wrinkled', *√* *reug-* *reug-* (Skr. *luk-* 'a falling off, disappearance', Lat. *rūg-a*, Lith. *raūka-s* 'wrinkle'), cp. Lat. *runc-āre*. Skr. *muñc-á-ti* 'lets go, frees, gets free, runs away', Lat. *ē-mungō*, Lett. *mūku* 'I make off, flee' for \**munk-u*, *√* *meug-* *meug-*. Skr. *yuhj-a-ti* (beside *yunák-ti* § 625), Lat. *jung-ō* *√* *jeug-*, cp. Lith. *jūng-iu* 'I yoke to'. Skr. *bhuñj-a-ti* 'makes to eat or enjoy' (beside *bhunák-ti* Class XV), Lat. *fung-or*. Avest. *lunj-a-iti* 'lays down, frees, saves itself', cp. Gr. *περύγγων* *φυγγάνω* § 631. Lith. *bund-ù* 'I wake up', cp. Gr. *πυνθ-άνομαι* § 631.

✓ *qert-* 'cut': Skr. *kṛnt-á-ti* 'cuts, splits', Lith. *krint-ù* 'I fall off, drop' (of leaves, fruit and so forth), Idg. *\*qṛnt-é-ti*, cp. I § 285 Rem. p. 228. O.Ir. *in-grennim* 'I pursue' i. e. *\*ghrendō?* (cp. § 633), O.C.Sl. *gręd-a* 'I come', originally *\*ghrę-dh-ō* ✓ *ghredh-*, cp. Goth. *gridi-* f. 'step, grade' Lat. *gradior* for *\*ghrdh-jo-* (§ 717). ✓ *reg-* 'stretch, extend': Skr. *ṛñj-á-ti* (beside 3<sup>rd</sup> pl. mid. *ṛñj-atē* Class XV), cp. Lith. partic. *į-si-rėžęs* 'having stretched oneself' infin. *isž-si-rėsztī* 'to stretch out' *rąžau* 'I stretch' derived from a stem *\*rinž-* = Skr. *ṛñj-* (from *riž-* = *ṛj-* were derived *rēžiū̃s* 'I inflate myself' and *rāižau-s* 'I stretch myself', cp. below, Goth. *þeiha þáih*).

Formed from such roots with *r* we find in several languages present stems with vocalism of the strong grade. These must be regarded as new formations. Examples are: Skr. *śrambh-a-tē* 'entrusts', Gr. *ῥέμβ-ο-μαι* 'I turn myself round', Mid.Ir. *dringim* 'I ascend', O.H.G. *spring-u* 'I leap', Lith. *dręs-ù* 'I am brave'; details will be found under the separate headings.

✓ *plāq-* *plag-*: Lat. *plang-ō*, Lett. *plāku* 'I become flat, fall flat down' for *\*plank-u*, cp. Gr. *πλάζω* 'I strike, knock aside, lead astray' (*ἐπ'αγξω πλαγκτό-ς*) for *\*πλαγγ-ω* § 631. Lat. *clang-ō*, cp. Gr. *κλαγγ-άνω* and *κλάζω* for *\*κλαγγ-ω* § 631 (pf. *κέκλαγγα*), O.Icel. *hlakka* 'I cry out' (*-kk-* for *-nk-*), beside Gr. *κλώζω* 'I cluck, caw' for *\*κλωγ-ω*.

Roots ending in a consonant, without liquid, nasal, *i*, or *u* (type *peq-* 'coquere') show an *e*-vowel. Goth. *þeiha* O.H.G. *dīhu* 'I thrive' for *\*þiəx-ō*, earlier *\*þeəx-ō* (cp. O.Sax. partic. *thungan* and causative *thengiu* 'I complete'), from which we have the re-formates *þáih dēh* etc. (I § 67 Rem. 2 p. 57), Lith. *tenkù* 'I last out, have enough' infin. *tėk-ti*, compare O.Ir. *tocad* Mod.Cymr. *tyngned* 'luck, happiness' (first for *\*tonketo-*, cp. the Latinised name *Tuncetace*, inscr. in Wales), which also point to a nasal present stem. Alban. *ënd-em* 'I am found', Lat. *pre-hendō*, Lett. *gīdu* 'I understand, conjecture' for *\*gend-u* ✓ *ghed-*, cp. Gr. *χανδάνω χείσομαι* § 631.

Several languages give *jo*-inflexion to this type (Class XXIX). Examples: Gr. *πίσσω πίττω* instead of *\*πινσ-ω*, *πλάζω* for



\**πλαγγ-ω*; Lat. *vinc-iō*, *sanc-iō* (cp. *sacer*); Lith. *jūng-iu*, Lett. *mī/chu* (beside *mī/nu*) 'mingo' for \**minz-iu*. See § 744.

§ 629. Aryan. Skr. *vind-á-ti* Avest. *vind-a-iti* 'finds', *✓* *yeid-*; Skr. *siñc-á-ti* Avest. *hinc-a-iti* 'pours out', *✓* *seiq-*; Skr. *kñt-á-ti* Avest. *ker'nt-a-iti* 'cuts', see § 628 where other examples are given. We may also mention the following: Skr. *śiṣ-a-ti* 'leaves over' beside *śinás-ti*; *und-a-ti* 'moistens, wets' beside *unát-ti*; *umbh-a-ti* 'holds together, holds in custody' beside 2<sup>nd</sup> sing. *unap*; *tñp-á-ti* 'is satisfied' *✓* *terp-*; *bñh-a-ti* 'strengthens' *✓* *bhergh-*; *śñth-a-ti* from *śrath-* 'to become loose or soft'; Avest. *mer'nc-a-itē* from *marc-* 'destroy' beside 2<sup>nd</sup> pl. mid. *mer'æg'-duyē* (§ 626). Sometimes in Sanskrit the accent is changed to the accent of Class II *A*, as *śumbh-a-ti* and *śumbh-á-ti* 'adorns' (beside *śóbh-a-tē*), partic. mid. *túñj-a-māna-s* (3<sup>rd</sup> pl. *tuñj-átē* Class XV, *tuj-yá-tē* 'is struck, knocked'), *dñh-a-ti* beside *dñh-á-ti* 'strengthens' (beside *dñh-ya-ti*), *prñc-a-ti* 'mingles' (beside *prñák-ti* and *pi-pñg-dhi*). With secondary strong grade vocalism (cp. § 628 p. 165): Skr. *śranth-a-tē* (gramm.) beside *śñth-a-ti*, *śrambh-a-tē* 'entrusts' (cp. *ni-śymbhá-s*), *anu-rañjati* 'cleaves truly to, loves' (cp. *rāga-s* 'colour, passion, love', Gr. *ῥέζω ῥέγμα ῥογέυς*), Avest. 3<sup>rd</sup> sing. pret. *mor'nd-a-ḥ* for \**mar'nd-a-ḥ* (I § 94.3 p. 89) from *mard-* 'kill' (or does *-ar-* = *-ḥ-*?); of the same sort may be Skr. *vánd-a-tē* 'praises, honours' beside *vád-a-ti* *ud-yá-tē*.

Roots of the type *peq-* (§ 628 p. 165). Skr. *spand-a-tē* 'throbs', beside Gr. *σπεδ-αρό-ς*, § 627 p. 163. *stambh-a-tē* 'strengthens itself, stands fast, supports itself', beside Lith. *steb-iū-s* 'I wonder' *stēb-iū'-s* 'I keep myself back' *stāba-s* 'apoplexy'. Sometimes the nasal is only found in non-present forms. Thus from *✓* *seg-* 'fasten, hang' (Skr. *sajjatē* for \**sa-zj-a-* § 562 p. 110, Lith. *segù*): Skr. perf. *sa-sañj-a* aor. *a-sañj-i* partic. *-sañk-tavya-s*; from Ar. *dabh-* or *dhabh-*<sup>1)</sup>

1) The desiderative forms *dhipsati dhīpsati* are late re-formates instead of Ved. *dīpsati*, certainly not instead of pr. Ar. *dhabh*. Compare *dhak*, p. 171.

'to hurt, deceive' (cp. Skr. *á-dbh-u-ta-s* § 596. 2, p. 136, desid. Skr. *dīpsa-ti* Avest. *diwža-idyāi* § 667, Skr. perf. *da-dābh-a*, *-dābha-s* 'hurting', Avest. caus. *dābayē-iti*): Skr. perf. *da-dāmbh-a* caus. *dambháya-ti dambh-a-s* 'deceit'. In such instances, one of two explanations is possible. (1) Either a nasal present which was the origin of these nasal forms has perished. With *sañj-* compare O.C.Sl. *seg-na* § 636; *dambh-* may be illustrated by Gr. *ἀτρέμω* 'I hurt, deceive', if the root is *dhebh-*, and if this Greek word is a contamination of *θ(ε)μβ-* and *τε(μ)γ-*. (2) Or the nasal came from other words; thus *dadám̐bha*, beside *dabhnóti*, was formed on the analogy of *tastám̐bha* : *stabhnóti*, and similar pairs.

§ 630. Armenian. Present stems of this kind I know none; but cp. *giut* 'profit, gain', which seems akin to *\*yind-ō* (§ 628 p. 164).

§ 631. Greek. Only a few examples of the unextended stem can be found. *λινδέσθαι* · *ἀμιλλᾶσθαι* beside *λίζονσι* · *παίζουσιν* Hesych. for *\*λινδ-ιω?*), connected by Fick with *λοίδωρο-ς* and Lat. *loido-s lūdu-s*. *σφίγγω* 'I tie, fasten', compared with Armen. *pirk*, for *\*sphig-ro-s*, by Bugge (Idg. Forsch. I 453). With secondary strong-grade vowel (cp. § 628 p. 165): *ρόμβομαι* 'I turn round, revolve' (*ρόμβο-ς* 'bull-roarer, wheel') containing Idg. *\*uṛg-* from *√uerg-*: Skr. *vrñák-ti* 'twists together' infin. *vrñj-ásē*, Mid.H.G. *runke* A.S. *wrinclē* 'wrinkle' O.H.G. *rench(i)u* 'I turn, pull backwards and forwards in turning'. Root of the type *peq-* (§ 628 p. 165): *στέμβω* 'I shake, misuse, handle roughly' beside *στόβο-ς στοβέω στοβάζω*.

Passing over to Class XXIX (§ 628 p. 165). *πίσσω* *πίττω* 'I crush, bruise' instead of *\*πτινσ-ιω* (the Author, Gr. Gr.<sup>2</sup> p. 61): Skr. *a-pīṣ-a-t* etc., see § 628 p. 164. *πλάζω* 'I strike, knock down' for *\*πλαγγ-ιω*: Lat. *plang-ō* etc., see § 628 p. 165. *κλάζω* 'I sound, cry out' for *\*κλαγγ-ιω*: Lat. *clang-ō* etc., see *ibid.* Perhaps also *σκιμπτω* 'I throw hard at something' for *\*σκιμπ-ιω*, beside Skr. *kṣīp-á-ti* 'throws, slings'.

Large numbers pass into Class XIV (§ 621 p. 158). *λιμπ-άνω* 'I leave': Lat. *linqu-ō* etc., see § 628 p. 164. *φνγγ-άνω* 'I flee' (Lesb. partic. *πεφύγγων*): Avest. *bunj-a-ti*, see § 628 p. 164. *πυνθ-άνο-μαι* 'I learn': Lith. *bund-ù*, see § 628 p. 164. *κλαγγ-άνω* beside *κλάζω*, see above. *θιγγ-άνω* 'I touch, feel', cp. *ἔ-θιγ-ο-ν*. *ἐρυγγ-άνω* beside *ἐρέυ-ο-μαι* 'I belch'. *τυγχ-άνω*, cp. *ἔ-τυχ-ο-ν*. *λανθ-άνω* beside *λήθ-ω* Dor. *λάθ-ω* 'I escape notice'. The existence of *λανθάνω* beside *ἔλαθον* produced *δαγκάνω* 'I bite' beside *ἔδακον* (*√ denġ-*), *λαγχάνω* 'I get by lot' beside *ἔλαχον* (perf. *λέλογχα*), and further, *χανδάνω* 'I hold' beside *ἔχαδον*, which was itself produced by analogy of *\*χενδ-ω* (cp. fut. *χείσομαι*) from *√ ghed-* (cp. § 628 p. 165). I am uncertain about *λαμβάνω* 'I take' beside aor. *ἔλαβον* perf. *εἵληφα* Cret. *λέλομβα* (like *εἵληχα* *λίλοχα*).

Where no present formation has survived: *ἵμψας* \* *ζεύξας*. *Θετταλοί* Hesych., beside Lat. *vinc-iō* Skr. *vi-vyak-ti* 'embraces, surrounds' 3<sup>rd</sup> dual *vi-vik-tá-s*, cp. *γυμβάναι* \* *ζεύγανα* (Hesych.) i. e. *φιμβάναι* (like *τύμπανο-ν*).

§ 632. Italic. Lat. *ningu-i-t* Umbr. *ninctu* 'ninguito', Lat. *dī-stinguō* Umbr. *an-stintu* 'distinguito', Lat. *ping-ō*, *pīns-ō*, *scind-ō*, *find-ō*, *lingu-ō*, *string-ō*, *ming-ō*, *rump-ō*, *ē-mungō*, *jung-ō*, *fung-ōr*, see § 628 p. 164. Lat. *vinc-ō* perf. *vīc-ī*, Osc. *vincter* 'convincitur', cp. Goth. *veih-a* 'I fight' Class II A O.H.G. *upar-wihit* Class II B, *√ ſeiq-* § 532 p. 94. Lat. *ſing-ō* beside *ſic-tu-s* *ſig-ulu-s*, *√ dheigh-*: O.Ir. *dengaim* 'I oppress' (so Thurneysen). *ling-ō* beside *ling-urriō*, *√ leigh-*. *tund-ō* beside *tu-tud-ī*. *pung-ō* beside *pu-pug-ī*. *ac-cumbō* beside *-cubūt cubāre*.

Lat. *frang-ō* for *\*bhṛæg-ō* beside *frag-ili-s*, Goth. *brika* 'I break', *√ bhreg-* (cp. Osthoff, M.U. v p. 111).

Lat. *pang-ō* beside *pe-pig-ī* Gr. *πήγ-νῶ-μι* 'I fix', *√ pāk-* *pāg-*; akin are doubtless Goth. *faha* O.H.G. *fāhu* 'I grasp, seize' (cp. Skr. *pāśa-* 'cord, line') for pr. Germ. *\*fanǣχ-ō*, with partic. O.H.G. *gi-fangan*. *tang-ō* beside *te-tig-ī* *in-teger* (Umbr. *antakres* 'integrīs'), *con-tāgiu-m*. *plang-ō* beside

*plāg-a*: Lett. *plūku*, see § 628 p. 165. *lamb-ō*, beside O.H.G. *laffu* 'I lick' perf. *luof*, √ *lab-*. Perhaps also *pandō* beside *pateō* and beside Osc. *patensins* 'aperirent', which comes from \**patəno* or \**patenō* (§ 622 p. 159); cp. § 612 p. 151;<sup>1</sup>) and *of-fendō*, see § 696.

*pre-hendō*: Alban. *gēnd-em* etc., √ *ghed-*, see § 628 p. 165.

The fertility of this type in Latin is made clear by *fund-ō* beside Goth. *giuta* 'I pour' for \**gheu-dō* Class XXV § 690. Cp. Goth. *standa* and the like, § 634 at end.

Passing into Class XXIX (§ 628 p. 165). *vinc-iō*, beside Skr. *vi-vyak-ti vi-vik-tás*, see § 631 p. 168. *sanc-iō* beside *sac-er*.

*langu-eō* (*langu-ēscō*) perf. *langu-ī* (beside *laxu-s* O.H.G. *slach* 'slack, lazy' and Gr. *λήγω* 'I cease', √ *slēg-*), following Class X, § 590 p. 132.

§ 633. Keltic. O.Ir. *dengaim* 'I oppress' from \**dhiñghō* (3<sup>rd</sup> pl. pass. conj. *for-diassatar* 3<sup>rd</sup> sing. perf. *dedaig*): Lat. *finḡō*, see § 632. O.Ir. *slucim* 'I swallow, gulp' (secondary -*io*-flexion) Mod.Cymr. *llyncaf llyngaf* 'devoro' from \**sluəkō*, √ *sla<sup>2</sup>uk-* *sla<sup>2</sup>ug-*, Gr. *λυκαίνω* and *λυγγάνομαι* 'I sob'.

O.Ir. *in-grennim* 'I pursue' with strong-grade vowel in the root: O.C.Sl. *gręd-a*, see § 628 p. 165; but compare the Remark. So also Mid.Ir. *dringim* 'I ascend' = O.Ir. \**dreng(a)im* (*drēimm* 'clambering' subst.), akin to Skr. *darh-* 'make fast' pres. *dṛh-á-ti dṛh-a-ti* (cp. Lith. *lipù* 'I mount up with my feet, climb' beside *limpù* 'I remain clinging', O.H.G. *chlimbu* 'I climb' beside *chlību* 'I cling').

O.Ir. *com-boing* 'confringit' (perf. 3<sup>rd</sup> sing. -*baig*), cp. Skr. *bhanák-ti* perf. *ba-bhañj-a* Armen. *bek-anem*. *tong(a)im* 'I swear' beside *co-tach* 'compact'. *in-dlung* 'I split' beside *in-dlach* 'split' subst.

1) Bartholomae (Stud. Idg. Spr., II 96 f.) derives *pangō pandō ē-mungō* from \**pank-nō* \**pant-nō* \**munək-nō* (cp. O.C.Sl. *krę(t)-nā* and the like, § 636). This view seems to me unjustifiable until the general principles which govern the interchange of *tenuēs* and *mediae* when root-finals in Indo-Germanic have been made out (I § 469.7 p. 346).

O.Ir. *ro-finnadar* 'gets to know' is related to Skr. *vind-á-ti* § 628 p. 164, and seems to have adopted *a*-flexion; but compare the Remark, below.

Remark. Thurneysen writes to me: "*Grenn-* and *finna-* appear in Old Irish always with *nn* and never with *nd*. I hesitate between two explanations. (1) Either *nd* very early became *nn* before the accent (the prefix which accented is always *ind-*, is either *inn-* or *in-* when pretonic); or (2) the nasal stood originally after the dental: *finna-* = *\*vid-nā-* or *\*vi-n-d-nā-*, *grenn-* = *\*gred-n-* (*\*grid-n-?*) or *\*gre-n-d-n-*. I am still searching for evidence to decide the matter." With *\*vindnā-* *\*grendn-* compare Lett. *brīnu* for *\*brendnu*, O.C.Sl. *segnq* § 615 p. 154, § 636.

§ 634. Germanic. Except *standa*: *stōþ*, all Germanic stems of this class run the nasal right through the verb.

Goth. *sigq-a* O.H.G. *sink-u* 'I sink', Goth. *stigg-a* 'I strike', see § 628 p. 164. Goth. *fra-slinda* O.H.G. *slint-u* 'I swallow' (re-formed, O.H.G. *slunt* 'throat'): cp. Mid.H.G. *slīte* A.S. *slīde* 'I slide, slip', Lith. *slid-ù-s* 'slippery, smooth' Lett. *slaid-s* 'steep'.<sup>1)</sup> O.Icel. *slæpp* 'I make slide' pr. Germ. *\*slimpō* (pret. *slapp*): cp. O.H.G. *slifu* 'I slide, sink', *✓ sleib-*. O.H.G. *climbu* 'I climb, clamber, ascend': cp. O.Icel. *klīf* 'I climb' pret. *kleif*, O.H.G. *chlību* 'I cling, hold'. *✓ gleip-* (*gleip-* and *leip-* are *p*-extensions of *✓ glei-* and *lei-*, cp. § 797). Mod.H.G. *blinke* 'I gli'tter' a weak verb, but originally doubtless strong (re-formate O.H.G. *blanch* 'bright'): cp. O.H.G. *blīhu* 'I gleam', Lith. *blyksztù* 'I turn pale' *blaiksztyti-s* 'to clear up'. From O.Sax. *mengian* (Goth. *\*maggjan*) 'to mingle' we must apparently infer *\*mingan* 'to mingle' akin to Skr. *miś-rá-* 'mixt'; see § 805. (Kluge in his Etym. Dict. explains differently).

Roots with *-er-* *-el-* show strong-grade vowels (cp. § 628 p. 165). O.H.G. *spring-u* 'I leap' instead of pr. Germ. *\*sprunag-ō* ground-form *\*sprægh-ō*: cp. Gr. *σπερχομαι* 'I hasten' *σπερχ-νό-ς* 'hasty'. O.H.G. *ring-u* 'I move to and fro, writhe violently'

<sup>1)</sup> Osthoff compares *fra-slinda* with Gr. *λαί-μός-ς* *λαί-τμα* (Zeitschr. deutsch. Phil., xxiv 215; Anz. für idg. Spr., i 82). According to this etymology, we should start with a stem *slī-t-* (cp. *r* in *λαίτμα*) which took a nasal infix. Compare below, in this section, on *standa* (p. 172).

A.S. *wringe* 'I turn, press' (cp. Goth. *vruggō* f. 'knot, noose'): cp. O.H.G. *wurg(i)u* 'I throttle, choke' Lith. *verž-iù* 'I tie together, enclose', √ *uergh-* (I § 285 Rem. p. 228). O.H.G. *scrint-u* 'I burst, blow up, split, rend' (O.H.G. *scrunta* 'split, tear, rent'): cp. Lith. *skėrdžiu* 'I burst, blow up, split', partic. *su-skirdžės* 'blown up, burst open', √ *sqerdh-* (i. e. *sqr+dh-*, § 689). Mid.H.G. *schrumpfe* 'I become wrinkled, shrivel': Pruss. *sen-skrempāsanan* acc. 'wrinkle, fold' (*p*, as elsewhere, wrongly written for *b*), cp. O.Icel. *skorp-r* 'shrivelled, dry' *skorp-na* 'I dry up' intr. Russ. *skorblyj* 'shrivelled', √ *sqerb-*. Mid.H.G. *sprinza* O.Icel. *spret* 'I leap, burst, blow up' doubtless akin to O.C.Sl. *pręd-ajā* 'I leap, tremble', √ (s)*perd-* (i. e. (s)*per+d-* § 700). O.H.G. *sling-u* 'I move, twist, swing to and fro, crawl' (cp. *slango* 'snake'), doubtless with Lith. *slenkù* 'I crawl' akin to Lat. *sulcu-s* 'furrow, snake's trail'.

Root type *peq-* (§ 628 p. 165). Goth. *þeiha* O.H.G. *dīhu* 'I thrive' pr. Germ. \**þeoχ-ō*: Lith. *tenk-ù* √ *teq-*, see § 628 p. 165. Goth. *finþa* O.H.G. *find-u* 'I find', as we may conjecture, from √ *pet-* Gr. *πένρω* (for the meaning cp. *ἐμπειρεῖν*). A.S. *ge-tinge* 'I hold on to, press' cp. *ge-tenzan* 'to make fast, add, join to' O.Icel. *tengja* 'tie or fasten together', beside Skr. *dagh-* 'reach up to, touch' √ *deg-* (Skr. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *dhak* is an ad-formate of roots which had both initial and final *media aspirata*): O.C.Sl. *degŭ* 'line, string' *ne-dagŭ* 'weakness, sickness'.

Goth. *fāh-a* O.H.G. *fāh-u* 'I seize' pr. Germ. \**fanχ-ō*, connected possibly with Lat. *pang-ō*, √ *pāk- pāj-*, see § 632 p. 165. Compare O.Icel. *banga* weak verb 'I strike, knock' Mod.H.G. Swiss *bang(e)* 'I give a knock' (Mid.H.G. *bengel* 'cudgel'), beside O.H.G. *bāgu* 'I fight, strive', O.Ir. *bāgim* 'I strive', √ *bhēgh- bhōgh-*.

Secondary *io*-flexion (§ 628 p. 165) must be assumed for O.H.G. *winch(i)u* 'I move sideways, fluctuate, nod, beckon' (pret. in Mid.H.G., pret. and part. in Mod.H.G. also strong — *wanc, gewunken*), if it, along with the Lith. *ving-i-s* m. 'deviation, bend' *ving-ù-s* 'crooked, bent' (compare *vėngiu* 'I avoid, do not want to do something' inf. *vėnkti*), is related

to O.H.G. *wīhhu* 'I shrink, yield' Gr. *oĩγvūμi* for \**ō-fīγ-* 'I open' ('make yield'). But these comparisons are doubtful (cp. Fick, Wtb., i<sup>4</sup> 541, 547 f.; G. Meyer, Et. Wört. der alb. Spr., 463; Per Persson, Stud. Lehr. Wurzelerw., 174 f.).

Nasal present stems from roots extended by *-t-*; see § 685. Goth. *standa* 'I stand' pret. *stōþ* O.H.G. *stantu* pret. *-stuot* (generally with intrusive nasal, *stuont*) for \**standō* ground-form \**stā-n-tō* from *√stā-*. Goth. *vinda* O.H.G. *wintu* 'I wind, turn, wrap, enfold' (pret. *vand want*), beside Goth. *ga-vida* 'I tie up' O.H.G. *witu* 'I tie, bind' from *uei-* Skr. *vī-tā-s* 'folded, enclosed' Lith. *vej-ù* 'I twist a cord' (cp. § 790). O.H.G. *swintu* 'I vanish, disappear' A.S. *swinde* beside O.H.G. *swī-nu* § 614 p. 152. Compare above, O.H.G. *scrintu* from *sger+dh-* p. 171, Mid.H.G. *sprinze* from *sper+d-* (*ibid.*), Lat. *fundō* from *gheγ+d-* § 632 p. 169, and again O.H.G. *chlimbu* from *gleiγ+p-* (above, p. 170), O.C.Sl. *tręsa* 'I shake, shatter' from *tr+es-* and Skr. *dhvāsa-ti* 'disperses, disappears' intr. from *dhu+es-* (Classes XIX and XX, cp. Per Persson, Wurzel-erweiterung, p. 83).

§ 635. Balto-Slavonic. In Baltic, this present formation is very productive.

Lith. *limp-ù* 'I cling, hold' (pret. *lip-aũ*), Lett. *sīk-u* 'I sink down, fall', Lith. *sėvint-ù* 'I grow clear', *sniņg-a* 'it snows', Pruss. *po-linka* 'remains', Lith. *string-u* 'I remain hanging', *runk-ù* 'I grow winkled', Lett. *mūk-u* 'I make off, flee', Lith. *bund-ù* 'I wake up' see § 628 p. 164. Lith. *stimp-ù* 'I grow stiff' (pret. *stip-aũ*), *tunk-ù* 'I grow fat' (*tuk-aũ*), *džiung-ù* 'I become glad' (*džiug-aũ*).

Lith. *krint-ù* 'I fall off' (*krit-aũ*): Skr. *kṛnt-ā-ti*, *√qert-*, see § 628 p. 165. *drimb-ù* 'I drop in thick drops' (*drib-aũ*), beside *dreb-iũ* 'I let fall in thick drops' Gr. *τρεφ-ε-ται* 'curdles' *√dhrebh-*. *trink-ù* 'I go wrong, do not come off' (*trik-aũ*), beside *trāk-a-s* 'foolish fellow' *trak-ù-s* 'foolish, mad' Gr. *ἀ-τρεχής* 'uninjured, exact, true'. *splint-ù* 'I spread' intr. (*split-aũ*), beside *splecziũ* 'I spread', trans.

Roots of the type *peq-* (§ 628 p. 165). Lith. *tenk-ù* 'I suffice in some respect, have enough of something' (*tek-aũ*): Goth.

*peiha* for pr. Germ. \**perx-ō*, see § 628 p. 165. Lett. *gīdu* 'I take in, conjecture', see § 628 p. 165. Lith. *gend-ù* 'I become damaged, split in two' (*ged-aũ*).

Lett. *plūku* 'I become flat, fall flat down' for \**plank-u*: Lat. *plang-ō*, see § 628 p. 165. Lith. *kank-ù* 'I hold out, suffice' (*kak-aũ*).

An indication of the fertility of this type in Lithuanian is the forming of present stems of the kind from nouns (cp. § 793); e. g. *rentù* 'I get thinner' (*retaũ*) from *rēta-s* 'thin, not close', *lempù* 'I pamper myself' (*lepaũ*) from *lepù-s* 'pampered'.

Secondary *jo*-flexion (cp. § 628, p. 165) is found only where the nasal spread beyond the present system. Lith. *jūng-iu* 'I yoke, put to' (inf. *jūnk-ti*) beside Skr. *yuj-a-ti* Lat. *jung-ō*, Lett. *mī/chu* 'mingo' for \**minz-ju* (inf. *mī/t*) beside Lat. *ming-ō*, § 628 p. 164. Lett. *kamp-ju* 'I seize, grasp' (inf. *kampt*), beside Lat. *cap-iō*.

Under the same conditions we have stems adopting to-conjugation (§ 686), where the meaning is intransitive. Lith. *jūnkstu* (Lett. *jūkstu* for \**junkstu*) 'I grow used' (*jūnkau jūnksti*) beside Lett. *jūku* for (*j*)*unk-u*, akin to O.C.Sl. *učq* 'I instruct' Skr. *uc-ya-ti* 'finds pleasure in' *ōkas-* n. 'pleasure, place of pleasure, home'; cp. O.C.Sl. *vyk-nq* and Goth. *bi-ūhts*, which likewise seem to have been nasalised (§ 636). Lith. *stīnkstu* 'I curdle, congeal, grow stiff' (*stīngau stīnksti*) beside Gr. *στίβω* 'I tread something hard' *στίβαρό-ς* 'firm, pressed, solid' (cp. Lith. *stėngiu* § 637). *sklīstù* 'I flow apart' (*sklindaũ sklīsti*) beside *sklīd-ina-s* 'full to overflowing' *skleidžiũ* 'I spread'; a pret. 3<sup>rd</sup> sing. *sklīdu* (*sklīdō*) is also found, pointing to a present \**sklīnd-ù*. Lett. *stringstu* 'I grow tight, dry up' (*stringu stringt*) beside Lith. *string-u* 'I remain hanging' (*strigau*) and *streg-iu* 'I crystallise, stiffen' (cp. § 628 p. 164). Lith. *drīstù* 'I grow bold' (*drīsaũ drīsti*), ✓ *dhers-*. *līnkstù* 'I bend' (*līnkaũ līnksti*) beside Gr. *λεκ-άνη* 'pan, fan' *λοξό-ς* 'crooked'; also Lat. *lanx* with nasal (for \**lōq-?*). The model for these presents is



seen in *blīsta* 'it darkens' beside *blind-ō* ✓ *bhlendh-*, *tīstū* 'I stretch myself out' beside *tīs-aū* stem *ten-s-*, and the like.

§ 636. This formation is much rarer in Slavonic than it is in Baltic. O.C.Sl. *strig-a* 'I shear, slave' for \**strinog-*? see § 628 p. 164. *gręd-a* 'I come' (inf. *gręsti*) for *ghyndh-* or \**ghrendh-*: O.Ir. *in-grennim*, see § 628 p. 165. *sęd-a* 'I sit' (inf. *sešti*), ✓ *sed-*, cp. Pruss. *sindats syndens* 'sitting' beside *sīdāns sīdons* = Lett. *sēdāš*. *lēg-a* 'I lie' (inf. *lēsti*), ✓ *leg-*. *tręs-a* 'I shake, shatter' inf. *tręs-ti* from *tr-es-*, unless it comes from \**trem-so-* (cp. Lith. *trimù* 'I tremble' Lat. *tremō*), see § 657. As regards *gręd-a* *lēk-a* 'I bend' *pręd-a* 'I spin' compare § 637.

Sometimes extended by *-io-* (§ 628 p. 165). *žęžd-a* 'I desire, thirst' for \**žęd-ia* (inf. *žędati*) beside Lith. *pa-si-gendū* 'I miss' and *geidžiū* 'I long for'. *glęžd-a* 'I look, gaze' for \**ględ-ia* (inf. *ględėti*) beside Mid.H.G. *glinze* 'I shine' O.H.G. *glīzu* 'I glitter'. See § 637. With nasal confined to the present system: *ob-ręšt-a* 'I find' for \**-ręt-ia*, inf. *-ręsti* aor. *-rętiū* (for the etymology of this verb see § 687).

There is another extension, with *-no-*. *vyk-n-a* 'I grow used' doubtless derived from \**vyk-a* = Lett. *jūku* for \*(*j*)*unk-u*, beside *uč-a* 'I teach' (§ 635 p. 173). *sęg-n-a* 'I long for' beside Lith. *seg-ū* 'I fasten', cp. Skr. *sa-sañj-a* § 629 p. 166. *křęn-a* 'deflecto' for \**křęt-n-a* (cp. *křatiti* 'to twist, turn'), beside Skr. *křnāt-ti* 'turns the thread, spins' *kārtana-m*. *sęk-n-a* 'I sink' beside Lett. *sīku* 'I sink, fall' for \**sink-u*, ✓ *seiq-* (§ 628 p. 164). *ręg-n-a* 'hisco' beside Lat. *ringor* (inf. *ring-ī*) *ric-tu-s*. Compare § 637.

§ 637. Side by side with Lith. *drimbū* (ground-form \**dhymbh-ō*) and the like stand forms with *e* in the root syllable (cp. § 628 p. 165). *dręs-ū* 'I am bold' (pret. *drīs-aū*) beside *drīs-tū* ✓ *dhers-* § 635 p. 173. *brendū* (dialectic *brindu* for *brendu*) 'I wade' beside *bredū* (*brid-aū*) O.C.Sl. *bred-a*. *lenk-iū* 'I bend' (*lenkiaū* *leñkti*) beside *link-stū* ✓ *leq-* § 635 p. 173. *trėndū* 'I am devoured by moths or worms' inf. *trendė-ti*, with *trīdē* beside Skr. *tṛṇatti* *tard-a-ti* § 692. We may assume

that *drēs-ù* for *\*drins-ù* was coined to supplement *drīs-au* on the analogy of *renk-ù : rinkaũ*, *kertù : kirtaũ* etc.; *lenk-iũ* appears beside *linkstũ* on the analogy of *grēž-iũ* 'I turn, twist' beside *grīszti* 'I turn myself' etc. Slavonic verbs with *ę*, *gręd-a* *lęk-a*, and *\*kręť-a* which appears to be implied by *krę-na*, may quite well correspond to Lith. *drimb-ù* or to Lith. *drēs-ù*.<sup>1)</sup>

Baltic *en* Slav. *ę* is found in present stems from roots with *i*-vowels both extended and unextended. Lith. *senkũ* 'I fall, sink' (of water) O.C.Sl. *sęk-na* 'I sink down' beside Lett. *stku* for *\*sink-u* Skr. *siñc-á-ti* / *seiq-* (§ 628 p. 164). Lith. *sprėndžiu* 'I grasp with the hand' (*sprėsti*) O.C.Sl. *pręda* 'I spin' (*pręsti*) beside Lith. *sprindi-s* m. 'span' Lett. *spraid-s* 'place where one stands in a narrow compass' *debes-spraisli-s* 'vault of heaven' O.H.G. *spreiten* 'stretch out, separate, part asunder'. Lith. *pa-si-gendũ* 'I miss' O.C.Sl. *žęžda* 'I desire, thirst' for *\*žęd-ia* beside Lith. *geidžiu* 'I desire' Goth. *gáido* n. 'lack' O.H.G. *gīt* 'eagerness, greed, avarice'. Lith. *stėng-iu* 'I apply my strength to something' beside *stėnkstũ* 'I congeal, get stiff' Gr. *στεῖνω* (§ 635 p. 173). Lith. *męz-ũ*<sup>2)</sup> 'mingo' (*mįzaũ mįszti*) Lett. *mīf-nu* for *\*menz-nō* beside Lett. *mīfchu* for *\*minz-iō* (§ 635 p. 173) Lat. *ming-ō* Lith. *mīžē* f. 'cunnus' *mīž-iu-s* 'penis', / *meižh-*. O.C.Sl. *glęžda* (inf. *ględēti*) and *ględaja* (inf. *ględati*) 'I look, gaze' beside Mid.H.G. *glinze* 'I shine, glitter' (pret. new formation *glanz*) O.H.G. *glīzu* O.Sax. *glītu* 'I glitter' / *ghleīd-*. O.C.Sl. *ręgnā* 'hisco' (*raqũ* 'jest', subst.) beside Lat. *ringor ric-tu-s*. If the Baltic forms stood alone, the explanation would be easy; we might say that the analogy of *renk- : rink-* etc. produced *senk- menž-* beside *sink- minž-*; compare what is said above on *drēsũ*. But this explanation does not suit

1) The fact that we find *kręť-* and not *čręť-* is not sufficient to prove that the ground-form of *kręť-* is the weak grade *\*qynt-*. Such a form must have become Slav. *\*krīnt-*, as *\*dhyns-* becomes Lith. *drins-*, and *\*qynt-* becomes Lith. *krint-* (I § 285 p. 227). There never was a form *\*kīrnt-*, nor yet *\*grųť-*, which Bartholomae suggests as the ground-form of *kręť-* (Stud. Idg. Spr., II 97).

2) Dialectic *minšũ* = *\*menšũ* (vol. I § 285 Rem., p. 227, is wrong).

the Slavonic forms, because in Slavonic, before consonants, Idg. *in* becomes *ī*, but Idg. *ṇ* becomes *ę* (I § 219. 4 p. 186).

Remark. Wiedemann's view (Arch. Slav. Phil. x 652 f., Lit. Praet. 58, 168 f.) — that Idg. *in* and *un* before consonants become slav. *ę* and *q*, except in final syllables — can hardly be maintained in this connexion, because we have *isto* = Lett. *inkstas*, *lyko* = Lith. *lūnka-s* Pruss. *lunka-n* and *smrūd-ę* (see below). Nor is Streitberg's attempt satisfactory (Idg. Forsch., I 283 f.). Perhaps the problem may be solved thus. We may suppose that originally *in* and *un* always became *ī* and *ū*; but that later, when *in* and *un* were again produced in any way before consonants, these became *ę* and *q*. We may suppose that *sink-* first became *\*sik-*, and afterwards, as the principle of Class XVI still remained active, the nasal crept into the stem anew; compare (say) Gr. Att. *ἐννύμι* for *\*φεονύμι*, which took the place of pr. Gr. *\*φερνύμι* (= Ion. *ἐννύμι*) for orig. *\*φεο-νύ-μι* (I § 565 p. 422). Similarly *bqđq* may come from *\*bhū-dhō* or *\*bhū-dō*, and may have got its nasal only at a late stage of protoethic Slavonic; though it may equally well be derived from *\*bhū-ā-dhō* or *-dō* attracted into the nasal class, or from *\*bhūon-dhō* or *-dō* regarded as an extension of a form *\*bhū-onō* (cp. § 701). Furthermore, for the 3<sup>rd</sup> pl. *smrūd-ętū* beside *smrūd-i-mū* etc. we may assume that the old ending *\*-int(u)* (cp. part. *smrūd-ęt-* Lith. *smird- -int-*) first lost its nasal, and then recovered it by analogy of *imqtū* etc.

The etymologies brought up by Wiedemann in his article in the *Archiv* by way of support to his view are all too uncertain to base any theory upon. O.C.Sl. *nāžda* 'compulsion, force, necessity' I connect with Skr. *nādh- nāth-* 'to be oppress, in need of help'; *tapū* 'blunt, dull', with *stemp- stemb-* in O.H.G. *stumpf*, Lith. *stambū-s* 'coarse' *stamba-s* 'stump'; *-dągū* 'force, strength' is to be connected with *dęgū* 'cord, strap, bridle' (Miklosich, Et. Wort., p. 49 a), and with O.H.G. *gi-zengi* 'reaching to, touching close' and Skr. *dagh-* 'to reach' (§ 634 p. 171).

## Class XVII.

The Root + *-ney-* *-nu-* forming the Present Stem.

§ 638. *-ney-* is the strong form of the suffix; *-nu-*, *-ny-* and *-nuy-* the weak forms. *-nuy-* follows a root with final consonant, cp. 3<sup>rd</sup> pl. Skr. *aś-nuv-ānti* Gr. *ἀγ-ρί-ᾱσι* as contrasted with Skr. *ci-nv-ānti*, I § 153 p. 138.

Beside *-ney-* *nu-*, Aryan has *-anau-* *-anu-*. See § 596. 3, pages 137 f.

The Root Syllable had originally the weak grade, except in Skr. *daś-ñō-ti* Gr. *δῆκ-νί-μενο-ς*.

§ 639. Pr. Idg. *\*r-ney-* *\*ǵ-ney-*, √ *er-*: Skr. *r-ñō-mi* 'I excite, set moving' 1<sup>st</sup> pl. *r-ñu-más* 3<sup>rd</sup> pl. *r-ñv-ánti* mid. 3<sup>rd</sup> sing. *r-ñu-tē*, conj. *r-ñáv-a-t*, opt. *r-ñu-yǎ-t*; Gr. *ὄρ-νῶ-μι* 'I excite, disturb, startle' 1<sup>st</sup> pl. *ὄρ-νῶ-μεν* (*ὄρ-* = *ǵ-*). — With thematic vowel: Skr. *r-ñv-á-ti*.

*\*r-ney-*: Skr. *r-ñō-mi* 'I fall in with something, reach, attain', Armen. *ar-nu-m* 'I take', Gr. *ᾶρ-νῶ-μαι* 'I attain, earn'. Perhaps identical with the previous verb. *ᾶρ-νῶ-μαι* as regards the grade of its root vowel would stand to *ὄρ-νῶ-μι* as *τι-νί-μεναι* to *τί-νῶ-νται*, and Skr. *stṛ-ñō-mi* to Gr. *στόρ-νῶ-μι* (see below).

*\*stṛ-ney-* *\*stǵ-ney-*, √ *ster-* 'sternere': Skr. *stṛ-ñō-mi*, Gr. *στόρ-νῶ-μι*.

*\*pstṛ-ney-*, √ *pster-* 'sneeze': Gr. *πτάρ-νῶ-ται*, cp. Lat. thematic *ster-nu-ō* (*sternūtāre*).

*\*tṛ-ney-*, √ *ten-* 'stretch, lengthen': Skr. *ta-ñō-mi* Gr. *τά-νῶ-ται*.

*\*sṇ-ney-*, √ *sen-* 'reach a goal, attain, end, complete'. Skr. *sa-ñō-mi*, Gr. *ᾶ-νῶ-μι ἥ-νῶ-το* (the regular spir. asp. appears in *ᾶ-νῶ-ω* and elsewhere). — Thematic: Gr. *ἄνω ἄνω* for *\*ᾶ-νῶ-ω*.

*\*qi-ney-*, √ *qei-* 'pay a penalty' etc.: Skr. *ci-ñō-mi*, Gr. inf. *τι-νί-μεναι*, also with *ι* mid. *τί-νῶ-νται*. — Thematic: Skr. *ci-nva-ti*, Gr. *τίνω τίνω* for *\*τι-νῶ-ω*.

*\*mi-ney-*, √ *mei-* 'lessen': Skr. *mi-ñō-mi*, cp. Gr. *μινύ-θω* (§ 694), Lat. *mi-nu-ō*.

Skr. *kṣi-ñō-mi* 'I destroy', cp. Gr. *φθι-νύ-θω* (§ 694), thematic *φθίνω φθίνω* for *\*φθι-νῶ-ω*.

*\*ghi-ney-*, √ *ghei-*: Skr. *hi-ñō-mi* 'I set in motion, drive on', cp. thematic Skr. *hí-nv-a-ti*, Goth. *du-ginna* 'I begin'. This comparison I regard as more likely than Bugge's (P.-B. Beitr., xii 405 f.). This scholar, followed by several others, has compared the Germanic verb with O.C.Sl. *na-čĭnq* (cp. Fick, Wort. I<sup>4</sup> 382).

\**dhu-ney-*, *\*dhū-ney-*, *√dhey-*: Skr. *dhu-nō-mi dhū-nō-mi* 'I shake, shatter', cp. Gr. *θέω* and *θῆνέω* 'I move wildly, storm' (§ 652).

\**dhys-ney-*, *√dhers-* 'be bold, dare': Skr. *dhṛṣ-ñō-mi* 3<sup>rd</sup> pl. *dhṛṣ-ñuv-ānti*, O.Sax. 1<sup>st</sup> pl. *\*durnum* (inferred from the later sing. *darn* conj. *dūrne*) = Goth. *\*daúr-z-nu-m* (§ 646).

\**dēk-ney-*, *√dek-* (Skr. *daśas-yá-ti* 'shows honour, is gracious or pleasant', Gr. Hom. *δέχ-αται δέχ-ο-μαι* § 560 p. 110, Lat. *decus*): Skr. *daś-nō-mi* 'I pay homage to', Gr. Hom. *δην-νύ-μενο-ς* 'paying homage, greeting' (so read, with J. Wackernagel, in Il. 9.196, Od. 4.59). The same grade of vowel as in Skr. *daś-ṭi daś-vás-* Hom. *δηκανόωντο*, and other words.

\**ues-ney-*, stem *\*u-es-* 'put on a garment' (§ 656): Armen. *z-genu-m* 'I dress', Gr. *ἐνν-μι* (*ἐννῶμι*).

We often see the same root forming a present both in this class and in Class XII; as Goth. 1<sup>st</sup> pl. *kun-nu-m* and Skr. *jā-nā-mi* *√gen-*, Avest. *sri-nao-iti* and O.Sax. *hli-nō-n*, Skr. *stṛ-ñō-mi* and *stṛ-ñā-mi*, *mi-nō-mi* and *mi-nā-mi*.

§ 640. Aryan. *√ger-* 'make': Skr. *kṛ-ñō-mi* Avest. *ker'-nao-mi* Skr. *kṛ-ñv-ānti* Avest. *ker'-nv-anti*, pret. Skr. *á-kṛ-nav-am* O.Pers. *a-kū-nav-am*<sup>1)</sup> Skr. *á-kṛ-ñō-t* Avest. *ker'-nao-p*, conj. Skr. *kṛ-náv-ani* Avest. *ker'-nav-ani*, opt. Skr. *kṛ-ñu-yā-t* Avest. *ker'-nu-yā-p*; — thematic Skr. 3<sup>rd</sup> sing. *á-kṛ-ñv-a-ta*.<sup>2)</sup> Skr. *vṛ-ñō-mi* 'I hide, cover, enfold' imper. *vṛ-ñu-hí* Avest. *ver'-nū-iđi*; also Skr. *ūr-ñō-mi* for *\*vūr-ñō-mi* pr. Ar. *\*ṛ-naṣ-mi* (I § 157 p. 141, § 306 pp. 241 ff.), like Gr. *σρόφ-νῦ-μι* beside Skr. *stṛ-ñō-mi*, Skr. *dhū-nō-mi* beside *dhu-nō-mi*; — thematic Avest. *ver'-no-a-iti*. Skr. *ta-nō-mi* 'I stretch, lengthen' (§ 639 p. 177), conj. Ved. *ta-náv-a* Avest. *ta-nav-a*, opt. mid. Skr. *ta-nv-īy-á* Avest. *tanuya* i. e. *ta-nv-iy-a*

1) For *kū-*, see I § 288, p. 230.

2) For Skr. *karō-ti kuru-ītha* J. Wackernagel offers a very likely conjecture (Kuhn's *Litteraturblatt*, III 55 f.). He suggests that *kṛñō-kṛñu-* became in vulgar speech *kañō-kuñu-*, and these became *karō-kuru-* by analogy of the other forms of the verb, which all had *r*.

(§ 940). Skr. *i-nō-ti* 'subdues, forces' Avest. *i-nao-iti*, doubtless akin to Gr. *αἰ-ρῶ-μαι* 'I grasp, take'; — thematic Skr. *i-nv-a-ti*. Avest. *sri-nao-iti* 'bends, directs somewhere', √ *klei-*. Skr. *su-nō-ti* 'presses out', 3<sup>rd</sup> sing. *á-su-nu-ta* Avest. *hu-nū-ta*; — thematic Avest. imper. mid. *hu-nv-a-rouha* (= Skr. *\*su-nv-a-sva*). Skr. *dhṛṣ-ñō-ti* 'dares', √ *dhers-*, § 639 p. 178. Skr. *aś-nō-ti* 'reaches' Avest. *aś-nao-iti*, ground-form *\*ñk-neu-ti*, opt. Skr. *aś-nu-yā-t* Avest. *aś-nu-yā-p*. Skr. *śak-nō-mi* 'I can'.

In Skr. *kṣ-ñāu-ti* 'whets' partic. *kṣ-ñuv-ānā-s* from √ *qes-* (II § 8 Rem. 2 p. 20), the root has ceased to be a separate syllable; compare perhaps Lat. *novā-cula*, first for *\*s-neu-ā-* (Kretschmer, Kuhn's Zeitschr. xxxi 419, 470). *au* instead of *ō* arose as in *ūrñāu-ti* (beside *ūr-ñō-ti*) by analogy of such a present as *stāu-ti*, see § 494 p. 55. The diphthong was regarded as part of the root proper, hence *kṣnu-tā-* (Avest. *hu-xšnu-ta-* 'well sharpened') *kṣñō-tra-* and *ūrñu-tya-* *ūrñavana-* (similar forms in Greek, see § 643 p. 183).

§ 641. Strong suffix instead of weak; Skr. 2<sup>nd</sup> pl. *á-kṛñō-ta* *kṛñō-ta* instead of *á-kṛñu-ta* *kṛñu-tā*, *hinō-ta* *hinō-tam* instead of *hinu-tā* *hinu-tām*, Avest. 2<sup>nd</sup> pl. *srinao-ta* (O.Pers. 3<sup>rd</sup> pl. *a-kūnav-a* *a-kūnav-atā* I regard as thematic, see § 649). Compare Skr. *grbhñā-hi* instead of *grbhñt-hi*, and like forms § 600 p. 143. *Vice versa*, Avest. 2<sup>nd</sup> sing. *ker'nūi-ši* contrasted with Skr. *kṛñō-ši*.

The strong stem occurs along with the weak in thematic conjugation; e. g. Avest. 2<sup>nd</sup> sing. pret. act. *ker'-nav-ō*. On this matter, refer to §§ 648 and 649.

In the 1<sup>st</sup> plural and dual, *-nu-* may drop its *-u-* before the personal ending, unless the root ends in a consonant; *kṛñmās* *kṛñvās* *kṛñmāhē* *kṛñvāhē* beside *kṛñu-mās* etc. *sunmās* beside *sunu-mās* etc. (but only *aś-nu-mās* *aś-nu-vās* etc.). The first trace of this new development is one example in Veda, *kṛñmahē*. It is possible enough that *kṛñvānti* : *aśnuvānti* suggested *kṛñvās* (instead of *kṛñuvās*) beside *aśnuvās*; or that *kṛñuvās* became *kṛñvās* naturally (cp. Wackernagel, Kuhn's Litteraturbl. iii 56), which

produced *kṛṇmās* by analogy. If *kṛṇvās* did arise by regular change, the variant *kṛṇuvās* must have been restored on the analogy of *kṛṇumās*, as *kṛṇmas* was coined on the analogy of *kṛṇvās*. However, some influence must have been exerted by the relation of *kurmás* *kurvās* *kurmāhē* *kuroāhē* to *kuruthā* *kuruthās* *kurudhvē*. *kurmās* is as early as the Rig-Veda, and \**kurumās* \**kuruvās* never seem to have existed at all. I would suggest that the forms with *kur-* are due to the analogy of the opt. aor. *kuryā-t* mid. \**kurī-tā-* (cp. *vurī-ta* *murīy-a*); and it would be all the easier to understand how the stems *kur-* and *kuru-* = *kṛṇu-* (p. 178 footnote 2) came to be confused, if the imperative *kuru* represents not only orig. *kṛṇu*, but a form \**qrr-* + the particle *u* (cp. the particle *-na* in Avest. 2<sup>nd</sup> sing. imper. *bara-nā* § 600 Rem. p. 143). Compare the references given to explain *kurmās* in § 498 p. 57.

Remark. Moulton (Am. Journ. Phil., x 283) thinks that *-n-* in forms such as *kṛ-ṇ-mās* is the weak form of *-nā-* (Class XII), and compares Avest. *ver<sup>o</sup>-n-iē*. But if only he could point to a Sanskrit example of *-n-* instead of *-ñi-* in Class XII!

2<sup>nd</sup> sing. Ved. *śṛ-ṇv-i-ṣē* (beside *śṛ-ñḍ-ti* 'hears') is an ad-formate of 3<sup>rd</sup> pl. *śṛ-ṇv-i-rē*, cp. *jajñ-i-ṣē* beside *jajñ-i-rē* (§ 574 p. 115).

On the strong root of Skr. *ap-ñḍ-mi*, see § 600 p. 144; for that of Skr. *dāś-ñḍ-mi*, § 639 p. 178.

Reduplicated: Avest. 3<sup>rd</sup> sing. mid. *as-aš-nu-tā* beside *aš-nao-iti* § 640 (Bartholomae, Kuhn's Zeitschr. xxix 309).

§ 642. Armenian. Verbs in *-nu-m* (sing. *-nu-m -nu-s -nu* pl. *-nu-mē -nuē -nu-n*).

*ar-nu-m* 'I take' (aor. *ar-i*): Skr. *ṛ-ñḍ-mi* etc., see § 639 p. 177. *jer-nu-m* 'I warm myself, get warm, glow' (cp. *jer-m* 'warm' = Gr. *ἰερ-μῶ-ς*): Skr. *ghṛ-ñḍ-mi* (gramm.). *l-nu-m* 'I fill', ground-form \**plē-nu-*, cp. Lat. *plē-nu-s*. *ait-nu-m* 'I swell', cp. Gr. *οἰδάω* 'I swell'. *tañ-nu-m* 'I hide myself', cp. Gr. *πρίσσω* 'I bow, bend'.

*z-genum* 'I dress myself' (*z-* is a prefix) for *\*ges-nu-* (I § 561 p. 417): Gr. *ἐνῦμι* (*ἐννῦμι*), see § 639 p. 178.

§ 643. Greek. *-vū-*, which we see in the strong persons of the singular, seems to have pushed out Idg. *-neū-*, because of the analogy of the forms *-vā-* : *-vǎ-* (Class XII), cp. § 480 p. 29, on *ἵμεναιόν* beside *ἵμεναιῶ*. Even if we supposed that *-vū-* represents Idg. *-nū-*, a weak grade, used along with *-nu-*, we should have to assume that the forms had followed *-vā-* : *-vǎ-*; and Avest. *-nū-* is not sufficient evidence for an Idg. *-nū-*. In the 3<sup>rd</sup> pl., *-vū-avti* (instead of *\*-vū-entī* = Skr. *-nuv-anti*, see § 1021.3) seems to have become regular quite early; once there were in use such forms as *\*ti-vf-avti* *\*ti-vf-entī* = Skr. *ci-nv-ánti* (cp. § 638 p. 177); as to Ion. *ἀγνῦσι* Att. *ἄγνυνται*, see §§ 1020.2 and 1065.2.

Besides the forms mentioned in § 639 — *ὄρ-vū-μι*, *ἄχ-vū-μαι*, *στόρ-vū-μι*, *πάρ-vū-μαι*, *τά-vū-μαι*, *ἄ-vū-μι*, *τι-νύ-μεναι* *τί-vū-νται* — there are yet others with weak-grade vowels in the root syllable. *θάρ-vū-μαι* in Hesychius (*-αρ-* = *-χ-*) and *θόρ-vū-μαι* (*-ορ-* = *-χ-*) 'I leap, cover (of animals)' (I § 306 p. 241). *κί-vū-μαι* 'I move myself'. Cret. 3<sup>rd</sup> sing. *πι-δίχ-vū-τι* = Att. *ἐπι-δείκνῦσι* (on *πι-*, see the Author, Gr. Gr.\* p. 219) *✓deĩk-*. *οἴγνῦμι* 'I open' Hom. *ὦ-(f)ίγ-vū-ντο* beside Lesb. inf. *ὀ-είγ-ην*, originally 'I make yield', beside O.H.G. *wīthhu* 'I yield, give way'. *μίγ-vū-μι* 'I mix' beside fut. *μείξω*, *✓meĩk-* *meĩg-*. *ὀμόργ-vū-μι* 'I wipe' for *\*mǝg-*, *✓merg-*. *ἄχ-vū-μαι* 'I am grieved, troubled', beside Goth. *un-agands* 'not fearing' *ōg* 'I fear'. An old form with strong root (third strong grade) is Hom. *δῆκ-νύ-μενο-ς* 'doing honour to, reverencing, greeting', see § 639 p. 178. Greek new formations with a strong root-form are *ὀρέγ-vū-μι* 'I reach, stretch out' *✓reğ-*, *δείκ-vū-μι* 'I show' beside Cret. *πι-δίχ-vū-τι*, *ζεύγ-vū-μι* 'I bind' *✓jeug-*, *πήγ-vū-μι* 'I fix' *✓pak-pāg-* and others. Ion. *δέκ-vū-μι* 'I show', coming, as we may conjecture, from a *✓dek-*, but in use finally confused with *δείκ-vū-μι* (cp. Fick, Wtb. I<sup>4</sup> 66). *ὄμ-vū-μι* 'I swear' beside *ὄμο-* (*ὀμό-σσαι* *ὀμό-τη-ς*), *ὀλλῦ-μι* 'I destroy' for *\*ὀλ-vū-μι*



(I § 204 p. 170) beside *ὀλε-* (*ὀλέ-σσαι*), like *δάμ-νη-μι* beside *δαμα-*, *κάμ-νω* beside *καμα-* (§ 602 p. 144).

The place of (Ion.) *εἴνυμι* 'I clothe' for *\*f-εσ-νυ-μι* = Armen. *z-genu-m* (§ 639 p. 178) was in Attic taken by a new form *ἐννυμι*; see I § 565 pp. 422 f. The following are forms of the same kind: *σβέννυμι* 'I quench, stop' for earlier *ζείνυμι* i. e. *zδείνυμι* (Hesych.)<sup>1)</sup> from a stem *\*zg-es-* *√seg-*, cp. aor. Hom. *σβέσ-σαι*; *βδέννυμαι* (gramm.) beside *βδ-έω* 'pedo' aor. *βδ-έσαι* for *\*βδ-εσ-*, earlier *\*βzd-εσ-*, *√pezd-* 'pedere' (cp. § 661). Further, *ζώννυμι* 'I gird'<sup>2)</sup> beside *ζωσ-τήρ* Idg. *j-ōs-* (§ 656). On the model of these were made *κορέννυμι* 'I satisfy', *πετάννυμι* 'I spread', *ῥώννυμι* 'I strengthen', *στρώννυμι* 'I strew, spread' and others; and the analogy of *ἡμφί-εσα -εσμαι*: *ἀμφι-έννυμι* gave rise to *κορέννυμι* beside *ἐκόρεσα κεκόρεσμαι*, etc.

A present *\*πί-νυ-μι* is represented by *πινυμένην* 'συνετήν' Hesych., compare *πι-νυ-τό-ς* 'enlightened, sensible' *πινύσσω* *πίνυσι-ς*. This, along with *νη-πύ-τιο-ς* 'senseless, under age, minor' and *νήπιο-ς* (same meaning) for *\*νη-πF-ιο-ς* (I § 166 p. 147), is akin to Skr. *pu-nā-ti* 'purifies, clears up' (for the accent cp. Goth. *hug-s* 'understanding, reason' beside Skr. *śuci-ṣ* 'pure', § 907). But *πινυ-* does not come from *\*πυ-νυ-* (I § 48 p. 41); the ground-form was *\*pm-i-nu-*, having the same determinative *ῥ* as we see in Ital. *\*pm-i-ḡo-s* (Osc. *piíhiúí* Lat. *piu-s*, see Bartholomae, Stud. Idg. Spr. II 185) Skr. *pav-i-tár-*, and in Gr. *πύρ* Umbr. *pir* O.H.G. *fuir* 'fire'. It follows that *\*πίνυμι*: Skr. *pu-nā-mi* = Skr. *r-i-ṇva-ti* Gr. *ῥρίνω*: Skr. *ῥ-ṇvá-ti* Gr. *ῥρ-νυ-μι* (cp. § 596. 4 p. 138).

1) Hesychius has *ζείναμεν* 'σβέννυμεν' which is emended to *ζείνυμεν*. This emendation is not necessary. There may quite well have been parallel forms, one in Class XII and one in Class XVII, as so often happens in Sanskrit. Then the form *ζείνυμι* in the text should be marked with an asterisk.

2) It is quite possible that Att. *ὑπο-ζωνύνα*[ι] C.I.A. I 77. 9 (second half of the 5th cent. B.C.) may represent the regular form (cp. *ἕζωμένος*, Meisterhans, Gr.<sup>2</sup>, p. 148).

*λάζνμαι* beside *λάζομαι* 'I take, seize', *κτείννμαι* beside *κτείνω* 'I slay' (for \**κτεν-λω*) are due to the analogy of *τίνομαι* *τίνομαι* (for \**τι-νF-ο-μαι*): *τίνννται* *τινόμεναι*, etc. But *καίννμαι* 'I surpass, outdo' was formed from *κέκασμαι* because *δέδασμαι* has *δαί-νν-μαι* (§ 707).

On thematic forms in *-νF-ω* see § 652. As regards those in *-νύω*, as *τανύώ* *ὀμνύω* *στρογγύω*, found in the Homeric dialect and in Attic more and more often from the 4<sup>th</sup> century B. C. onwards, it is doubtful whether they represent pr. Idg. verbs in *-nuṃ-ō*, which may have been used side by side with *-ny-ō* as in the 3<sup>rd</sup> pl. Skr. *aś-nuṃ-ánti* Gr. *ἄγ-νυ-ᾶσι* beside Skr. *ci-nu-ánti*. They may equally well be a new formation peculiar to Greek.

From *τάννμαι* *τανύώ* *γάννμαι*, whose structure was less clear to the consciousness of those who used them than was that of *ὄρ-νῦ-μι* *ἄγ-νῦ-μι* and words of that sort, were formed *τανύσσαι* *τετάννσται* *γανύσσεται* and so forth on the analogy of *ἐρύσσαι* *εἴρυσται* *ἐρύσσεται* beside the pres. *εἰρύμεναι* *ἐρύώ* 'I draw, pull'. Compare Skr. partic. *kṣṇu-tá-s* from *kṣ-ṇāú-ti*, fut. *aśnuviṣya-tē* from *aś-nō-mi* *ḍṣ-ṭa*, *arṇu-tya-* from *ar-ṇāu-ti* (§ 640 p. 179), and Greek itself *δυνατός* *ἐδυνησάμην* from *δύ-να-μαι* (§ 602 p. 145).

For *μι-νύ-θω* *φθι-νύ-θω*, see § 694.

§ 644. Italic. Only thematic forms occur in this branch; see § 649. An undoubted relic of *-ney-* is *nov-a-cula*, if it is to be connected with Skr. *kṣ-ṇāú-ti* (§ 640 p. 179).

Remark. Job (Mém. Soc. Ling. vi 353 f.) offers a very dubious suggestion, that in Latin present stems in *nu-* came directly from those in *no-*; he says \**tol-nu-mus* \**tol-nu-tis* lead at once to \**tolnimus* \**tolnitis* (*tollimus tollitis*), whence by complementary analogy *tollō*.

§ 645. Keltic. Not one of the original forms is preserved. On O.Ir. *ro-chluiniur* 'I hear' (beside Avest. *srunaoiti*), see § 604 p. 146.

§ 646. Germanic. The plural of certain verbs is of this class. Goth. O.H.G. *kun-nu-m* 'we learn, know' from \**ḡṇ-nu-*

*-mes* (cp. p. 86 footnote 2) as contrasted with Skr. *jā-ni-más*, Class XII; the parallel weak form Goth. *uf-kunna* 3<sup>rd</sup> sing. *-kunndi-p* is a new formation from *kann kunnum* on the analogy of *vita vitái-p* to *vát vitum*. Low Germ. *darn* 'I dare' conj. *dürne* gives ground for assuming an O.Sax. *\*durnum* Goth. *\*daúrz-nu-m* (I § 582 p. 434) = Skr. *dhṛṣ-ṇu-más*. O.H.G. *unnum* 'we grant' ground-form *\*ṇ-nu-mes* (cp. O.Icel. *qf-un-d* 'ill-will' beside Goth. *ans-t-s* O.H.G. *ans-t uns-t* 'favour, grace' II § 100 p. 303), from the same root as Gr. *πρῶσ-ηνής* 'inclined' *ἀν-ηνής* 'disinclined'. As these plurals appeared to be of the same kind as the preterite-present, they were conjugated in the same way. Thus arose, by analogy of the singular, Goth. *kann* O.H.G. *kan*, Low Germ. *darn* O.H.G. *an*. The same principle is neatly used by Kluge (Paul's Grundr. I 377) to explain O.H.G. *durfum* 'we must', which he regards as a *nu*-form for *\*ḡurpum* with *-p-* for *-pp-* Idg. *-pn-* (I § 530 p. 388) = Skr. *tyṇ-nu-más*; the student should compare de Saussure, *Mém. Soc. Ling.* VII 83 ff. Some further uncertain traces of *nu*-flexion in Germanic are given in § 605 Rem. p. 147, and p. 151 footnote 1.

Otherwise the Germanic branch prefers thematic conjugation (Class XVIII), as Goth. *du-ginna* (§ 654).

§ 647. Balto-Slavonic. For the remains of the present suffix *-nu-* in Slavonic see § 649 p. 185.

### Class XVIII.

Root + *-ney-o-* or *-ny-o-* forming the Present Stem.

§ 648. Side by side with *-nyo-* we meet with *-enyo-* and *-ṇyo-*; see § 596 pp. 137 f.

This class, which is based upon Class XVII, falls into two divisions like Class II. O.Pers. *a-kū-nav-a-tā* stands to Skr. *á-kr-ṇv-a-ta* as Gr. *ἐ-πνε(ν)-ε* to *ἄμ-πνν-ε*. And just as Skr. *ay-a-* is at once indicative (*áy-a-tē*, cp. Lat. *ed*), and conjunctive to an indic. of Class I (*áy-a-t áy-a-ti* conj. of *ē-ti*), so Ar. *kr-*

*-nav-a-* is also conjunctive to an indic. of Class XVII (Skr. *kṛ-nāv-a-t* conj. of *kṛ-ṇō-ti*). Here, as before, there was originally no distinction between the original form of the two moods.

§ 649. Class XVIII A: Suffix *-ney-o-*.

Aryan. Avest. 2<sup>nd</sup> sing. pret. act. *ker<sup>e</sup>-nav-ō* imper. *ker<sup>e</sup>-nav-a*, O.Pers. pret. 3<sup>rd</sup> sing. act. *a-kū-nav-a* 3<sup>rd</sup> pl. mid. *a-kū-nav-atā* (i. e. *-a-ntā*), [cp. indic. Skr. *kṛ-ṇō-mi* 'I make'; conj. Skr. *kṛ-nāv-a-t* *kṛ-ṇav-a-tha* Avest. *ker<sup>e</sup>-nav-a-ḥ* O.Pers. 2<sup>nd</sup> sing. *kū-nav-a-hy*. O.Pers. 3<sup>rd</sup> sing. imper. *var-nav-a-tām* conj. *var-nav-a-tiy* beside Avest. *ver<sup>e</sup>-nv-a-itē* 'believes' (B). Compare the conj. Skr. *aś-nav-a-tha* Avest. *aś-nav-a-ḥ* beside Skr. *aś-ṇō-mi* 'I reach', Avest. *sri-nav-a-hi* beside *sri-nao-mi* 'I bend, guide in some direction'.

Greek. It has been usual to class here forms like *θῦ-νέω* 'I move wildly, storm' beside Skr. *dhū-ṇō-ti*, *κί-νέω* 'I move from its place' beside *κί-νν-μαι*, *-νέω* being taken to be for *\*νεε-ω*. But since in all the verbs in question the future, aorist etc. have never *-νευ-*, as one might expect from *πλέω* *ἔπλευσα* and *νέω* *ἔνευσα*, but *-η-* always, and since Lesbian makes the present of them end in *-ημι* (imper. *κίτνη* like *φίλη*), this explanation is at least improbable. I derive *-εω* from *εχω* in every case. See § 801.

Italic. Lat. *minuō* and *sternuō*, which are connected with Skr. *mi-ṇō-mi* Gr. *μινύ-θω* and Gr. *πτάρ-νν-μαι* (§ 639 p. 177), can by rule be derived from *\*-ney-ō* (I § 172. 1 p. 152). But Osc. *menvum* 'minuere' makes it at least likely that *minuō* comes from *\*minyō* as *tenuis* from *\*tenyi-s* (I § 170 p. 149). The perfect *minuī* *sternuī* and the participle *minūtu-s* are ad-formates of *statuī* *statūtu-s* : *statuō*.

Slavonic. O.C.Sl. *mi-nuĭa* beside *mi-nā* 'I go past, pass by, flow by', and partic. pret. pass. *kos-novenū* 'touched' from pres. *kos-nā*, point to an older present inflexion *-novā* *-noveši* etc. (*-nov-* for *-ney-*, I § 68 p. 59). Compare Wiedemann, Arch. slav. Phil., x 653.

§ 650. Class XVIII B: Suffix *-ny-o-*.

Pr. Idg. Skr. *ci-nv-a-ti*, Gr. Hom. *τίνω* Att. *τίνω* for *\*τι-νf-ω* beside Skr. *ci-nō-mi* Gr. infin. *τι-νύ-μεναι* 3<sup>rd</sup> pl. *τί-νvv-νται*, § 639 p. 177. Skr. *hi-nv-a-ti* Goth. *du-ginna* beside Skr. *hi-nō-mi*, § 639 p. 177. *\*r-i-ny-e-ti* with root determinative *-i-* (§ 596. 4 p. 138); Skr. *ri-nv-a-ti* 'makes run, flow', Gr. Hom. *ὀρίνω* Lesb. *ὀρίννω* 'I set in motion' for *\*ὀρι-νf-ω* (the initial has perhaps been influenced by a word from the same root, *ὄρ-νῶ-μι*, ground-form *\*ḡ-nu-*, to which it stands related as Hom. *ὀγίνω* to Cret. *ὀγνέω*, see §§ 652 and 801), Goth. *ri-nna* 'I overflow' pr. Germ. *\*ri-ny-ō* (cp. however for the Germanic word § 654 p. 188).

With *-eny-o-* for the suffix (§ 596. 3 pp. 137 f.), *\*sp-eny-e-ti* from *√spē- spā-* 'bring onwards, stretch' (Lat. *spēs spatium* etc.): Avest. *spēnva-ḥ* 'proficiebat' = pr. Ar. *\*spanya-t*, O.H.G. *spinnu* 'I spin' (cp. O.H.G. *spannu* = *\*spā-ny-ō* § 654).

§ 651. Aryan. Skr. *ṛ-nv-d-ti ci-nva-ti hi-nva-ti á-kṛ-nva-ta i-nva-ti ri-nva-ti*, Avest. *ver<sup>e</sup>-nva-iti hu-nva-rouha* see §§ 639, 640, 641, and 650. Skr. *pī-nva-ti* 'swells, makes abound' beside partic. mid. *pi-nv-ānā-s* Avest. *fra-pinao-iti* 'swells, spreads' (intr.). Skr. *jī-nva-ti* 'sets in motion, pushes on, hastens' beside *ji-nō-mi*. Skr. imper. mid. *du-nva-sva* beside *du-nō-mi* 'I burn'.

Sometimes Sanskrit, like Germanic, has a verb which carries the suffix of the present through the whole verbal system; as *pīnva-ti*: *pīpinva pīnvayati*, *jīnvati*: *jīnviṣya-ti jīnvi-tā-s*.

Observe the different accent of 3<sup>rd</sup> pl. *hīnva-nti*, and *hīnv-ānti* in Class XVII.

Containing the suffix *-eny-o-*. Avest. *spēnva-ḥ* 'proficiebat': O.H.G. *spinnu*, see § 650; Avest. *xwanva-inti* 'they drive on' *xwēnva-ḥ* pr. Ar. *\*sy-anya-*, beside *hu-nao-iti hu-nā-iti*.

§ 652. Greek. On the treatment of *-νf-* in the following words, see I § 166 p. 146. *ἄνω ἄνω* for *\*ἄ-νf-ω*, *τίνω τίνω* for *\*τι-νf-ω*, *φθίνω φθίνω* for *\*φθι-νf-ω*, *ὀρίνω ὀρίννω* for *\*ὀρι-νf-ω*, see §§ 639, 650. *φθάνω φθάνω* 'I anticipate' for

\**φθα-νfw*, beside *φθά-μενο-ς*. *δίνω* Lesb. *δίννω* 'I eddy' for \**δλ-νfw*, beside Skr. *dī-ya-ti* 'flies' Lett. *dēi-ju dī-t* 'to dance', cp. *δῖνο-ς δίνη* Lesb. *δίννᾱ* for \**δλ-νfo-ς δλ-νfā*. Hom. *ἀγίνω* 'I lead, bring' beside *ἄγω* Cret. *ἀγνέω* has the same root-determinative as *ὀρίνω* (on this determinative, which is contained in Skr. *āj-āi-ṣ*, see § 498 p. 61); and therefore *ἀγίνω* too must be derived from \**-νfw*; on the bye-form *ἀγινέω*, see § 801. With *ὀρ-ίνω ἀγ-ίνω ἀγινέω* compare the Hesychian glosses *ἔξινειν ἐπεσβέννυνεν* and *ἔξινει ἐπεσβέννυνεν*, which point to \**zg-ī-* as variant stem to \**zg-es-* (§ 643 p. 182). Whether Homer's *θίνω* 'I move wildly, storm', represent orig. \**dhū-nuō* or \**dhū-nō -n-īō*, Class XIII (cp. Skr. *dhū-nō-ti dhu-nō-ti dhu-nā-ti*) cannot be decided; in the former case *θῖνο-ς* 'fury, impetus' should be compared with *δῖνο-ς* for \**dī-nuō-s* (see above); for *θῖνέω δινέω* see § 801.

Hom. *κίχάνω* Att. *κίχάνω* 'I reach, overtake' for \**-ανfw* beside *κί-χη-μι* (§ 594 p. 135). *κίχάνω* has the first syllable nasalised because, after *f* had gone, the analogy of verbs like *θιγγάνω* could act upon it (§ 621 p. 158, § 631 p. 168). Hom. *ίχάνω* 'I arrive, reach' for \**ίχανfw*, bye-form *ίχνέομαι* (§ 801). Both of these present stems may be regarded as ad-formates of \**φθανfw* (*φθάνω φθάνω*), because they all had something of the same meaning: on the analogy of *φθήσομαι* to *φθάνω*, *κίχάνω* was formed working backwards from *κίχίσομαι*, and afterwards *ίχάνω*. But there was another suffix *-ημῶ* before Greek became a separate language; and this would become regularly pr. Gr. *-ανfw* (the Author, Gr. Gr.<sup>2</sup> § 21. 3 p. 41), see § 596. 3 p. 138.

The suffix is *-ενυο-* in Corcyr. *ξ-ίνφο-ς*, whence Lesb. *ξέιννο-ς* Ion. *ξείνο-ς* Att. *ξένο-ς* (I § 166 p. 146), since this word seems to have the same root as Lat. *hos-ti-s* and Goth. *gas-t-s*; see § 596. 3 and 6, pp. 138 and 140.

§ 653. Italic. Lat. *mi-nu-ō*, Osc. *menvum* 'minvere', see § 649 p. 185.

§ 654. Germanic. Goth. *du-ginna* O.H.G. *bi-ginnu* 'I begin', see § 639 p. 177, § 650 p. 186. Goth. *af-linna*

'I go away, cease', O.H.G. *bi-linnu* 'I cease', beside Skr. *vi-lināti* 'goes to pieces, dissolves, melts' etc. § 598 p. 142. Goth. *vi-nna* 'I suffer, feel pain, worry', O.H.G. *gi-winnu* 'I reach something with trouble, win' (cp. O.H.G. *winna* 'strife'), beside Skr. *vē-ti* 'presses on in hostile fashion, conquers, seeks eagerly, tries to win'. All these verbs came under the influence of such others as Goth. *binda*; hence forms like *du-ginna -gann -gunnum -gunnans*.

O.H.G. *ba-nnu* 'I order, command on pain and penalty, summon' (cp. O.H.G. *ban*, gen. *bannes* 'command enforced by pains and penalties' A.S. *bann* 'ban, banns, proclamation'), ground-form *\*bhā-nyō*, √ *bhā- bhā-*, cp. Armen. *ba-na-m* § 601 p. 144, Gr. *qairw* for *\*qa-vi-w* § 611 p. 150. O.H.G. *spa-nnu* 'I stretch, widen, spread, I am anxious and excited', ground-form *\*spā-nyō*, √ *spē- spā-*, cp. O.H.G. *spa-nu* 'I entice, charm' (§ 614 p. 152) and O.H.G. *sp-innu* (see below). The preterites *bian spian* follow *hialt : haltu* and such like forms.

Containing the suffix *-enyo-* (§ 596. 3 p. 138). O.H.G. *sp-innu* 'I spin': Avest. *spēnva-ḥ*, see § 650 p. 186; a variant form is *spannu* = *\*spā-nyō*, for which see just above. O.H.G. *tr-innu* 'I separate from, part, depart from' ground-form *\*dr-enyō*, √ *der-* 'split' (Skr. *ḍṛ-ṇā-ti*).

The existence of the two variants *-nyō-* and *-enyo-* in Germanic raises a question as to how Goth. *rinna* 'I run' and *brinna* O.H.G. *brinnu* are to be disposed of. Instead of deriving *rinna* from *\*r-i-nyō*, and identifying it with Skr. *rinva-ti* (§ 650 p. 186), we may assume *\*r-enyō* for its original form, which would bring it closer to Skr. *ṛ-nv-ā-ti*. *brinna* may come from *\*bhr-enyō*, as it is akin to Lat. *fer-mentu-m ferveō* O.Ir. *ber-baim* 'I cook, boil'; but it may be for *\*bhr-i-nyō* with an *i*-determinative, cp. O.Icel. *br-ī-me* 'fire' A.S. *br-ī-w* O.H.G. *br-ī-o* 'broth'. The first derivation, from *\*r-enyō* *\*bhr-enyō*, is supported by Goth. *r-un-s* 'a run, course' A.S. *br-yne* 'fire, conflagration'.

## E. CLASSES XIX TO XXI.

PRESENT STEMS WITH *-s-*<sup>1)</sup>

§ 655. A large number of verb classes have an *s* suffixed to the root. These are both thematic and non-thematic. (1) Non-Thematic Stems: Skr. *dvē-ṣ-ti* 'hates' (cp. Avest. *dvaeṣ-pa* 'terror' Gr. Hom. *δέ-δδι-μεν* or *δέ-δφι-μεν* 'we fear'), Skr. aor. 1<sup>st</sup> pl. *á-tq-s-mahi* ( $\sqrt{\text{ten-}}$  'stretch'), Skr. *v-ás-tē* 'dresses' ( $\sqrt{\text{ey-}}$ , Lat. *ex-uo*), Gr. *ῥδεα* i. e. *ῥ-φειδ-ισ-α* Idg. *\*es-ṛ*, Skr. *á-vēd-iṣ-am*. (2) Thematic Stems: O.H.G. *din-su* 'I pull, tear', Skr. *á-ta-tq-sa-t* 'he tore, set in motion by force' ( $\sqrt{\text{ten-}}$ ), Skr. desid. *ji-gā-śa-ti* ( $\sqrt{\text{gem-}}$  'go'), Skr. *tr-áśa-ti* 'trembles' (cp. *tar-alá-s* 'trembling, moving to and fro' Lat. *tr-emō*), Skr. desid. *ji-gam-iṣa-ti* ( $\sqrt{\text{gem-}}$ ). From these develop extensions of the *-s-* suffix, which themselves run through large groups: *-s-ṣo-* *-as-ṣo-*, fut. Skr. *tq-syá-tē gam-iṣyá-ti*; *-s-ko-*, Lat. *(g)nō-scō* Gr. *γν-γνώ-σκω* (cp. Skr. desid. *ji-jñā-sa-tē*); and others more isolated, as Armen. *z-genum* Gr. *ἐννυμι* (*ἐννυμι*) for *\*u-es-neu-* (§ 639 p. 178, § 643 p. 182).

It cannot be definitely proved that in all these forms *s* has really the same origin. But the negative cannot even be made probable. The clearest indication of the identity of *s* in the aorist with *s* in verbs of Classes XIX and XX is given by Skr. *á-kr-ṣ-i* as compared with *kr-ṣ-ē*, *dk-ṣ-i* compared with *ak-ṣa-tē*, *á-mṛk-ṣa-t* compared with *mṛk-ṣa-ti*, see §§ 656, 659; compare too Lat. *vīs-i* beside pres. *vīsō* (§ 662), Lat. *aux-i* Lith. 1<sup>st</sup> and 2<sup>nd</sup> pl. injunct. (fut.) *áuks-me -te* beside Gr. *αὔξω* (§ 657). It should further be noticed that a close connexion is often formed with the noun suffix *-es-*, as in Skr. *bhy-áśa-ti*

1) Compare Per Persson's new work (*Wurzelerweiterung*, etc.) pp. 77 ff., where the suffix or determinative *s* in assumed for other forms besides those which will here be cited. Amongst these are some in which we have regarded the *s* as part of the root itself; e. g. Skr. *vāṛṣa-ti* 'it rains', which he derives from the root of Skr. *vāri* 'water, wetness'.



'is afraid' and *bhī-ṣ-aya-tē*, used as causal of *bi-bhē-ti*, beside *bhy-ās- bhiy-ās-* 'fear' instr. *bhīṣ-ā* (§ 658), in Skr. *úk-ṣa-ti* 'grows strong' Gr. *αὔξω* beside Skr. *ḍj-as-* 'strength' (§ 657), and in Skr. indic. *á-jāi-ṣ-am* beside inf. *jī-ṣ-ē*, indic. *ṛñj-as-ē* beside infin. *ṛñj-ās-ē*, Gr. *ἔδειξα* beside infin. *δείξαι*, conj. *ferrem* beside inf. *ferre*, conj. *agerem* beside inf. *agere* (§ 824). We must not forget that no clear line can be drawn between primary *s*-verbs and verbs derived from *s*-nouns, any more than between primary verbs with *-ā-* and nouns having the same suffix: e. g. Gr. *ἔ-σβ-εσ-ται ἔ-ξ-εσ-ται σβ-εσ-τό-ς ξ-εσ-τό-ς* stand to *τε-τέλεσ-ται ἤδεσ-ται αἰδ-εσ-τό-ς ἀ-κήδεσ-το-ς* related in the same way as *πέ-πλ-η-ται* Dor. *ᾗ-πλ-ᾗ-το-ς* to *τε-τίμη-ται τιμη-τό-ς*.

In this section we take count only of present stems with *s* final, and those which have a thematic vowel after the *s*. The compound suffix *-s-ko-* fills Classes XXII and XXIII; and *-s-ṣo-* (the future suffix) will be found in the *ṣo*-class, §§ 747 ff. Stems like *\*μ-es-neμ-* (*εἶνυμι*) are discussed under the heading *-neμ-*, in §§ 639, 642, and 643.

Since the *s*-aorist in its common form adds the personal endings directly to *s*, its proper place is here, in Class XIX. It may, however, if preferred, be treated separately in the traditional way, for the reasons given above in § 485, pp. 38 f. See §§ 810 ff.

### Class XIX.

Root + *-s-*, *-es-*, or *-əs-* forming the Present Stem.

§ 656. Very few additional forms belong to this class besides the preterites which will be discussed in §§ 810 ff.; such, I mean, as Skr. *á-ta-s-mahi* Gr. *ἦδ-ε-α* Skr. *á-ved-iṣ-am*. Some of them carry the *s*-element right through the verb system.

Skr. *dvē-ṣ-ṭi* 'hates' 3<sup>rd</sup> pl. *dvi-ṣ-ānti*, Avest. *d<sup>h</sup>biš-entš*, beside Avest. *dvaē-ḥa* 'terror' Gr. *δφει-* 'to fear'; — thematic,

Skr. *dvi-ša-ti*. Skr. 3<sup>rd</sup> pl. *á-tvi-ṣ-ur* 'they were excited, amazed' beside Avest. *ḫwāyant-* 'terrifying' *ḫwāya-* 'terror'; — thematic, Skr. *á-tvi-ṣa-ta*, Gr. partic. *σών* for \**σι-σων* pres. *σειω* instead of \**σει-σω* (cp. *σέ-σεισ-ται* etc.), see § 657.

Skr. *v-ās-tē* 'dresses, clothes himself' Avest. *vas-tē*, Gr. *ἐπί-εσ-ται* 2<sup>nd</sup> sing. *ἔσ-σαι* from *✓εμ-* Lat. *ex-uō* Lith. *au-nū*.

Avest. *y-ās-ti* 'girds' Lith. *j-ũ's-mi* 'I gird' (Att. *ζώννυμι* instead of \**ζωσ-νῦ-μι*, § 643 p. 182), Idg. \**j-ōs-ti*, beside Skr. *y-āú-ti* *y-uvá-ti* 'binds up', like Skr. *r-āsa-ti* 'bellows, howls' beside *r-āu-ti* *r-uvá-ti*.

Here come a certain number of Vedic middle forms with -s- in the present, those which Grassmann has called "double stems": 1<sup>st</sup> and 3<sup>rd</sup> sing. -s-ē partic. -s-āna-. 1<sup>st</sup> sing. *kṛ-ṣ-ē* from *kár-ti* 'makes'. 1<sup>st</sup> sing. *hi-ṣ-ē* from *hi-nō-ti* 'drives on' partic. *hiy-āná-s*. 1<sup>st</sup> and 3<sup>rd</sup> sing. *stu-ṣ-ē* from *stāu-ti* 'praises' mid. *stu-tē*. 1<sup>st</sup> sing. *arcas-ē* from *árca-ti* 'praises'. 1<sup>st</sup> sing. *yajas-ē* from *yája-ti* 'honours, offers'. 1<sup>st</sup> sing. *ṛñjas-ē* partic. *ṛñjas-āná-s* from *ṛñjá-ti*, *✓reṣ-* 'stretch, reach' (Class XVI § 628 p. 165). 1<sup>st</sup> sing. *pu-nī-ṣ-ē* from *pu-nā-ti* 'purifies' mid. *pu-nī-tē*. 1<sup>st</sup> sing. *gā-yi-ṣ-ē* from *gā-ya-ti* 'sings'. A similar Avestic form is 1<sup>st</sup> sing. *rānhañh-ōi* from *rās-* 'to grant'.

## Class XX.

Root + -so- or -eso- forming the Present Stem.

§ 657. The s-suffix mostly runs through all parts of the verb.

Pr. Idg. From *✓ten-* 'stretch, lengthen out': Skr. *tq-sa-ti* 'tears, sets moving by force' (not actually found), aor. *á-ta-sa-t* for \**tq-se-* (redupl. *á-ta-tq-sa-t*), Goth. *at-pinsa* 'I draw towards me', cp. Lith. *tęs-iù* 'I lengthen, stretch' (infin. *tęs-ti*), *už-tęsa-s* 'a shroud', Lat. *tōn-sa*; cp. aor. Skr. *á-tā-s-am* 3<sup>rd</sup> sing. *á-tān*, Gr. *ἐρεῖνα* for \**ἐ-τεν-σα*. From *✓bhel-* 'shriek, cry, bellow, bleat, low' (O.C.Sl. *blě-ja*): Skr. *bhāṣa-ti* 'bellows' (I § 259 p. 211), O.H.G. *billu* 'I bellow' (-ll- = -lz-, I § 582 p. 436),

cp. Lith. *baĩ-sa-s* 'voice, tone'. From  $\sqrt{tqeĩ-}$  (Avest. *ṇwyant-*): Skr. *tvē-ṣa-ti* 'is in violent motion, is amazed' (not actually found), pret. *á-tvi-ṣ-ata*, Gr. *σειώ* 'I shake, shatter, agitate, molest' for *\*σει-σω* (cp. Solmsen, Kuhn's Zeitschr. xxix 98), *σάω* for *\*σι-σάω*; cp. Skr. *á-tvi-ṣ-ur* § 656. From  $\sqrt{preu-}$  (Lat. *pruina*): Skr. *plō-ṣa-ti* 'burns, sings', O.H.G. *friu-su* 'I freeze, am cold', cp. Lat. *prūr-iō*. From  $\sqrt{leq-}$  (Gr. *ἀλ-αλx-εῖν* 'ward off'): Skr. *rāk-ṣa-ti* 'guards, saves', Gr. *ἀλέξω* 'I ward off, help'. Connected with Skr. *vājāya-ti* 'strengthens' *ōjas-* 'strength, power, might' Lat. *augeō*: Skr. *ūk-ṣa-ti* 'grows strong, increases' partic. *uk-ṣā-māṇa-s* (perf. *vanákṣa*) Avest. *vax-ṣa-iti* 'makes grow', Gr. *ἀ(φ)έξω αὐξω* 'I make grow, increase', cp. Lat. *aux-iliu-m*,<sup>1)</sup> Gall. *Uxello-dūnu-m* 'High-town' O.Ir. *ōs uas* 'above' (I § 517 p. 377), O.H.G. *wah-su* Goth. *vah-s-ja* 'I grow' (pret. *vōhs*), Lith. *áuksz-ta-s* 'high'.<sup>2)</sup> Gr. *έβω* 'I boil', which, along with Armen. *εբեմ* 'I boil' (I § 561 p. 417), we may assign to the root of *επω* 'I see about, make right, arrange' (Il. 11. 776 *ἀμφὶ βοός ἐπετον κρέα*) Skr. *sáp-a-ti* 'makes a fuss about, carries on, sees about something'.

From  $\sqrt{ter-}$  (Skr. *tar-ald-s* 'moving to and fro, trembling' Gr. *τρεμέω* Lat. *tr-emō* § 488 p. 45): Skr. *tr-āsa-ti* 'trembles' (also *tar-āsa-ti* § 659), Gr. *τρε-ί(σ)ω* 'I tremble, flee', O.C.Sl. *tresq* 'I shake, shatter' perhaps a re-formate instead of *\*tresq* (§ 636 p. 174); with *-s-*, Lat. *terreō* for *\*ter-s-* (cp. Gr. *ἐτρεσεν· ἐφόβησεν* Hesych.). Compare Skr. *gr-asa-ti hr-asa-ti bhy-āsa-ti* Avest. *v-anaha-itē* § 659, Gr. *ξ-έ(σ)ω βδ-έ(σ)ω* § 661, Lat. *qu-ero-r* § 662.

1) According to Bréal's convincing explanation, Umbr. *orer ose* 'his (donis) macte' will fall in this place too. *ose* = pr. Ital. *\*aukse* may be a vocative, which would make it necessary to start from an adj. *\*aukso-s* meaning 'auctus'; it may also be an imperative like Gr. *αὐξε* (cp. Lat. *auxim*). The first view is supported by Lat. *macte*, a vocative (F. D. Allen, Am. Journ. Phil., 1 135 ff.). Pauli's explanation of *ose* (Alt. Stud. v 123) does not seem right to me.

2) On the relation between *meg- aug- ameg-*, see Per Persson, *Wurs.*, 228.

§ 658. In § 655 it was pointed out that these *s*-suffixes are probably connected with the noun suffixes *-es- -as- -s-* (§§ 131 ff.). A few more examples of this may be given:

Skr. *tq-sa-ti*: Skr. *tānas-* Lat. *tenor*. Skr. *úk-ša-ti* Gr. *αὔξω*: Skr. *ōjas-* Skr. *śrō-ša-māna-s* O.C.Sl. *slu-chŭ* (§ 659): Skr. *śrávas-* Gr. *ῥέ(φ)ος*. Skr. *bhú-ša-ti* (§ 659): Skr. *bhavas- bhúvas-*. Skr. *dák-ša-ti* (§ 659): Skr. *daśas-ya-ti* Lat. *decus*. Skr. *sák-ša-nt-* (§ 659): Skr. *sáhas-*. O.Pers. *patiy-aršaiy* (§ 659), Skr. *ík-ša-tē* (§ 667): O.C.Sl. *oko* gen. *očes-e*. Avest. *vax-ša-itē* (§ 659): Skr. *vācas-*. Armen. *luçi* (§ 660): Skr. *-rōcas- rōciṣ- ruciṣ-ya-s*. Lat. *vīsō* (§ 662): Skr. *vēdas-* Gr. *εἶδος* *FlōFoç* *ῥοο-ç* for *ῥιτσ-fo-ç* (p. xiii). O.Icel. inf. *hrjōsa* (§ 664): Skr. *kraviṣ-* Gr. *κρί(φ)ας*. Compare also Skr. *bhartsa-ti* (beside *bhartsaya-ti*) 'attacks sharply, rates, scolds', akin to Lat. *fer-iō*, Lith. *bar-iū* 'I scold', and so doubtless derived from some such stem as *\*bhar-tas-* (cp. *srō-tas-* 'stream') or *\*bhar-dhas-* (cp. *rā-dhas-* 'grace, gift'). The nouns *-tqsa-dakṣa- sakṣa- var-ša-* which are connected with *tqsa-ti* *dákṣa-ti* *sákṣa-nt- varṣa-itē* were therefore related to *tānas- \*dāśas- (daśas-ya-ti) sáhas- vācas-* in the same way as *vat-sá-* to Gr. *ῥέρος*, Skr. *śtr-ṣá-* to *śtras-*, *hō-ṣá-* to *havīṣ-*, and so forth (II § 132 p. 190).

Skr. *bhāsa-ti* (§ 659): *bhās-* Lat. *fas*.

Skr. *hr-asa-ti* (§ 659): *hāras-*. Skr. *yaj-as-ē* (§ 656): Skr. *yajás-*. These are like *bhy-āsa-ti* beside *bhyás- bhiyás-* (already mentioned in § 655, page 190).

§ 659. Aryan. Skr. *tq-sa-ti á-ta-sa-t*, *bhāṣa-ti*, *tvē-ṣa-ti á-tvi-ṣa-ta* (*tvē-ṣá-s* 'boisterous' Avest. *ḫwaē-ša-* 'terror'), *plō-ṣa-ti*, *rāk-ṣa-ti*, *úk-ṣa-ti uk-ṣá-māna-s*, Avest. *vax-ša-iti* see § 657. Skr. *ár-ṣa-ti ṛ-ṣá-ti* 'moves quickly, flows quickly', from *ar-* 'begin to move' (*ṛ-nō-ti*). Skr. *i-ṣa-tē* 'sets in motion, sends forth' Avest. *aēšemna- išaiti*, from *i-* 'to send' (*i-nō-ti*). Skr. *śrē-ṣa-ti* 'hangs to something, clasps' *á-śli-ṣa-t*, Avest. *sraēšemna-*, *✓kleṣ-* 'lean' (Lat. *-cli-nō*). Skr. *śrō-ṣa-ti* 'hears' (redupl. *śú-śrū-ṣa-tē* § 667) Avest. *sraošemna-*, *✓kleṣ-* (2<sup>nd</sup> sing.

*śró-ṣi*), cp. O.Ir. *cluas* 'ear' (I § 516 p. 377) O.Sax. *hlus-t* 'hearing' O.C.Sl. *sluchŭ* 'hearing, faculty of hearing'. Skr. *ghóṣ-ṣa-ti* 'cries out, proclaims aloud' (*ghóṣa-s* 'confused noise, roar of a storm, cry of woe'), beside Goth. *gáu-nōn* 'to cry for woe'. Skr. *bhū-ṣa-ti* 'applies himself to, takes trouble about', ✓ *bhey-* (Skr. *bháva-ti*). Skr. *sūr-k-ṣa-ti* 'is anxious about something, takes thought for it, or account of it', beside Goth. *saúrg-a* 'care', which must be connected with O.Ir. *serc* 'love' or with Lith. *sérg-iu* 'I protect'. Skr. *mrak-ṣa-ti* *mrk-ṣa-ti* 'rubs, strokes', beside *már-ṣ-ṭi* 3<sup>rd</sup> pl. *mrj-ánti*. Skr. *akṣa-tē* ground-form \**ṛk-se-tai* beside *aś-nó-ti* 'reaches' (§ 640 p. 179); from the same root, *nák-ṣa-ti* 'reaches' beside *náš-a-ti* Lith. *nesz-ù*; with these must also be connected Goth. *bi-niuhs-ja* 'I search out' *niuhs-ein-s* 'visitation, affliction', which come from \**nux-s-* = Idg. \**ṛk-s-* (cp. *gi-naúhan* 'to suffice'). Skr. *mók-ṣa-tē* 'gets free from something' (redupl. *mú-muk-ṣa-ti* § 667), beside *muc-á-ti* *muñc-á-ti*. Skr. *bhak-ṣa-ti* 'enjoys, eats, devours', Avest. *bax-ṣa-iti* 'divides, receives for share', beside Skr. *bháj-a-ti*. Skr. *dák-ṣa-ti* 'acts so as to suit or satisfy somebody' mid. 'plunges, dips, ducks, is dexterous' (*dakṣá-s* 'dexterous') beside *daśas-ya-ti* 'is at one's service, shows respect'. Skr. *lak-ṣa-tē* 'marks', from *lag-* 'fasten on'. Skr. *sák-ṣa-nt-* 'overpowering', from *sah-* 'to overpower'. Skr. injunct. *ap-sa-ntu* 'they sought to get', beside *ap-nó-ti* (§ 600 p. 144), cp. the reduplicated *īpsa-ti* (§ 667). O.Pers. *patiy-aršaiy* 'I inspect', beside Skr. *ák-ṣ-i* 'eye' O.C.Sl. *oko* (gen. *očes-e*) 'eye', cp. the reduplicated Skr. *ík-ṣa-tē* (§ 667) and the Gr. imper. aor. *ὀψεσθε*. Avest. *vax-ṣa-itē* 'speaks', from *vac-* 'speak'. Avest. *tax-ṣa-iti* 'makes run' beside *tac-a-iti* 'runs' Skr. *ták-a-ti*. Avest. *sax-ṣa-iti* 'learns', beside *sacayē-iti* 'teaches' Skr. *śak-nó-ti* 'is able', cp. the reduplicated Skr. *śikṣa-tē* Avest. *a-sizša-nt-* (§ 667).

The preterite type belonging to this class is productive in Sanskrit, where, with roots which made final *kṣ* when *s* was added to them, it was used for the aorist; specially frequent when the root had *ṛ*, *i*, or *u*. Examples: *á-mrk-ṣa-t* cp. above, *mrk-ṣa-ti* from *marj-*, *á-spyk-ṣa-t* from *sparś-* 'touch', *á-ṛk-ṣa-t*

from *varh-* 'tear, tear out', *á-dik-ša-t* from *diš-* 'show', *á-lik-ša-t* from *lih-* 'lick', *á-dhuk-šat* and *á-duk-šat* (the latter an ad-formate of the type *áduhat*, cp. Gr. *ἐνεῖσα* instead of *\*ἐφείσα* following *πείσω* etc., I § 496 p. 364) from *duh-* 'milk'. The forms *dhukšá-n dhukšá-nta*, and others like them, are remarkable as having the accent upon the thematic vowel. The aor. *á-myk-ša-t* it related to the pres. *myk-ša-ti* not otherwise than the aor. *á-kṛ-ṣ-i* to the pres. *kṛ-ṣ-ē* (§ 656 p. 191). O.Pers. *niy-apišam* 'I wrote', with *š* = *ks*, *✓peṣk-* (I § 401 p. 297), seems to belong to the same class; as no other persons are preserved, it is possible to assume that this is non-thematic, but the root-vowel is in favour of believing it to be thematic. The aorist use in all these forms is due to the weak grade of root syllable, just as with *á-sic-a-t* and the like (§ 513 pp. 78 f.). But the imperfect meaning was not excluded either with this type without *s* or with the *s*-preterite which we are now dealing with: *ádhukša-t* is imperfect as well as aorist (Whitney, Am. Journ. Phil. vi 281). On this aorist type in general see § 833.

Skr. *bhāsa-ti* 'appears, shines', beside *bhā-ti*. Skr. *rāsa-tē* 'bestows, affords', Avest. 1<sup>st</sup> sing. *rānhē* beside Skr. *rā-tē*. Skr. *hāsa-tē* 'runs in a match', from *hā-* 'go' *ud hā-* 'to start up'. *rāsa-ti* 'roars, bellows' beside *rāya-ti*; as regards *rāsa-ti* compare further § 656 p. 191.

Skr. *tr-āsa-ti* 'trembles', also *tar-āsa-ti* (partic. *tarāsanti* Rig-V.): Gr. *τρ-έ(ο)ω*, see § 657 p. 192. Skr. *gr-asa-ti* 'swallows, devours', beside *gir-á-ti* (Class II, § 523 p. 86) *✓ger-*; akin to Gr. *γράφω* 'esse', perhaps for *\*gy-sō*? Skr. *hr-asa-ti* 'takes away, diminishes, grows less', beside *hār-a-ti* 'takes, takes away'. Skr. *bhy-āsa-ti* 'fears' (caus. *bhī-ṣaya-tē*) beside *bi-bhē-ti*, cp. § 655 p. 190. Avest. *v-anṣha-itē* beside *v-as-tē* 'dresses' § 656 p. 191. We should doubtless add *vusa-ti* 'bellows' beside *rāsa-ti* and *rāu-ti*, see § 656 p. 191.

§ 660. Armenian. Besides *eḡem* 'I boil' (see § 657 p. 192) may be named the aor. *luṣi* 'I kindled' for *\*leyk-so-* (pres. *luṣanem*), *✓leyq-* 'lucere', cp. Skr. *ruk-ṣá-s* 'shining',

Lat. *illūstri-s* for \**in-louc-s-tri-*, A.S. *līxan līxan* 'shine' = Goth. \**liuhs-ja-n* (cp. II § 66 p. 140).

§ 661. Greek. *σείω*, *ἀλέξω ἀτίξω αὐξω*, *ἔψω* see § 657 p. 192. *κλάω* 'I break, break off' for \**κλα-σω* ground-form \**k̑l-sō*, cp. *κί-κλασ-ται*, Skr. *śṛ-ṇā-ti* 'breaks to pieces'; parallel stems *κλ-ā-* in partic. *ἀπο-κλάς* (Class X, § 582 p. 123), and *κλα-δ-*. *γράω* 'esse' for \**gr-sō* connected with Skr. *gr-asa-ti*? see § 659 p. 195. *ὀδάξω ὀδαῖομαι* 'I bite, itch, sting', beside *δάκ-νω*, *✓deh̑k-*, cp. *ὀδάζω ὀδαγμός-ς*. *δέψω* beside *δέφω* 'I knead, soften' (Lat. *depsō* is a loan word). *σπάω* 'I pull' for \**spa-σω* (cp. *ἔ-σπασ-ται*), possibly = \**spra-sō*, cp. O.H.G. *spra-nu spa-nnu* § 614 p. 152, § 654 p. 188.

*τρεῖ(σ)ω* 'I tremble, flee': Skr. *tr-āsa-ti*, see § 657 p. 192. *ξέ(σ)ω* 'I shave, smooth' beside *ξένω* from *✓qes-* O.C.Sl. *čes-ati* 'to comb, curry' Lith. *kas-ýti* 'to scratch' (cp. II § 8 Rem. 2 p. 20). *βδέ(σ)ω* 'pedo' for \**βzd-εσω* from *✓pezd-* Slov. *pezdž-ti* 'pedere' (I § 594 p. 450).

That some of the trisyllabic presents in *-εω* making aorist in *-εσσα* etc., such as *καλέω (κάλεσσα) ἀλέω (ἄλεσσα) στρέω (στρέσαι)*, had originally the ending *-εσω* (cp. Skr. *tarāsa-ti* § 659 p. 195, *arcas-ē* § 656 p. 191), is not improbable; *καλέ(σ)ω* : *κάλεσσα* = *τρέ(σ)ω* : *τρέσσα*. Compare § 842.

In Greek this *-s-* is not only found with *ἔδειξα* and like aorists, but elsewhere too it is a favourite tense suffix. Compare *ἐ-σκεδά-σ-θην ἐ-σκέδα-σ-σα*, *κί-κέρα-σ-ται ἐ-κέρα-σ-σα*, *ὀμ-ώμο-σ-ται ὠμο-σ-σα*, *ξυ-σ-τός ἐ-ξύ-σ-θην*, *εἴρου-σ-ται ἐρου-σ-τός ἔρου-σ-σα*. No clear distinction can be made between "Primary" and "Denominative" verbs (cp. *τε-τίλεσ-ται* beside *τέλος*, *αἰδεσ-τός* beside *αἰδώς*, *ἐ-γέλασ-θην* beside *γέλως*, *ἐ-μεθύσ-θην* beside Skr. *mādhuy-*), because *s* in these verbal stems is the same as *s* in the stems of the cognate nouns, as has already once been said (§ 655 pp. 189 f.).

Compare further the use of the suffixes *-εσ-* and *-η-* in stems of the same group, *σβ-εσ-τός ἔ-σβ-εσ-σα* : *ἔ-σβ-η-ν ἔ-σβ-η-κα*, *ἐ-κάλ-εσ-σα* : *καλ-ή-τωρ κέ-κλ-η-κα*, *κε-κόρ-εσ-ται ἐ-κόρ-εσ-σα* : *κε-κόρ-η-μαι ἀ-κόρ-η-το-ς*.

§ 662. Italic. Lat. *vīsō* (perf. *vīsī*), near kin to Goth. *ga-veisō* 'I look after some one, I visit', doubtless for *\*ueīd + sō* (not *\*uīd + tō*, Class XXIV, as Osthoff will have it, Morph. Unt. iv 77), cp. Skr. *vi-vīt-sa-ti* § 667. *quaesō* (perf. *quaesīvī*) for *\*quais-sō*, beside *quaer-ō*. *in-cessō ar-cessō* (perf. *-cessīvī*) from *cēd-ō cessī*. *ac-cersō* for *\*cers-sō* doubtless connected with *currō* for *\*cors-ō kys-ō*.<sup>1)</sup>

*queror ques-tu-s*) for *\*qu-esō(-r)* beside Gr. *κω-κύω* 'I bewail, cry, shriek' Mid.H.G. *hiuweln* 'to howl, lament, cry' O.H.G. *hūwila hiuwila* 'owl'. Compare § 657 p. 192.

§ 663. Keltic. No *s*-presents seem to occur. The forms which Windisch (Wtb., p. 593 *b*) assign to a first person *gessim* 'I beg' are more probably conjunctive of the *s*-aorist of *guidim* (§ 826). On *seiss* 'placed itself, sat' and 'sits', see § 833.

§ 664. Germanic. O.H.G. *billu* 'I bellow', Goth. *at-þinsa* 'I draw towards me' O.H.G. *dinsu* 'I pull, tear', O.H.G. *friusu* 'I freeze', see § 657 p. 191. Goth. *fra-liusa* O.H.G. *vir-liusu* 'I lose' (*vir-lus-t* 'loss'), beside Goth. *la-n-s* f. 'ransom' Gr. *λύ-ω* Lat. *so-lvō* etc. O.Icel. *hrýs* 'I shudder' inf. *hrýðsa*, from *√ grey-* Skr. *krū-rá-s* 'coarse, horrible, gruesome, bloody', cp. Gr. *κρυ-σ-ταίνω* 'I cause to freeze' Lat. *cru-s-ta* and Osc. *krustatar* ('cruentetur' according to Bücheler). O.H.G. *wīsu* 'I avoid, eschew, shun' beside Lat. *vītō*, doubtless for *\*ueit-sō* (*\*uīt-sō*), not for *\*ueit + tō* (*\*uīt + tō*) Class XXIV.

Goth. *uf-blēsa* 'I inflate, blow out' O.H.G. *blasu* 'I blow', beside O.H.G. *blāu* i. e. *\*bhlē-īō*, cp. Mid.H.G. *bluo-s-t* A.S. *blō-s-tma* beside Germ. *\*blō-īō* 'I bloom' and Lat. *flōs flōreō*.

§ 665. Balto-Slavonic. Lith. *tēs-iū* 'I lengthen' containing *\*tēs-u* = Skr. *tq-sa-ti* etc., see § 657 p. 191. Lith. *tres-iū* 'I am in heat', said of bitches, derived from *\*tr-es-e-ti* = Skr. *tr-āsa-ti* 'trembles' etc., see § 657 p. 192;

1) If Germ. *\*χrussa-* 'horse' (O.Sax. O.Icel. *hross*) is connected with *currō*, it stands to *ac-cersō* as Skr. *mṛk-ṣā-s* 'oomb, currycomb' to *mṛak-ṣa-ti*.



add Slav. *tręsetŭ* 'shakes, shatters' with a nasal infix, unless it is really *\*trem + sō-* (cp. Lith. *trimu* Lat. *tremō*), see § 636 p. 174.

The same *s* is sometimes found also with transformed and derivative verbs, and in nouns; as O.C.Sl. *q-cha-ti* 'to smell' (cp. Lat. *(h)alō* for *\*an-s-lo-*, I § 208 pp. 175 f., § 588 Rem. 2 p. 444), *ja-cha-ti* 'vehi' (cp. *ja-da* 'vehor' § 701), Lith. *baĩ-sa-s* 'voice, sound, tone' (cp. § 657 p. 192), O.C.Sl. *slu-chŭ* 'hearing, faculty of hearing' (cp. § 659 p. 194), O.C.Sl. *gla-sŭ* 'sound, voice' (I § 585 p. 441).

### Class XXI.

Root + *-so- -aso-*, with reduplication ending in *-ĩ (-ũ)* forming the Present Stem.

§ 666. This class is represented by the Aryan Desideratives, many of which have little or nothing of the desiderative in their meaning (e. g. Skr. *ikṣa-tē* 'sees' from *√oq-*, from which a desiderative stem *ic-ikṣ-iṣa-* is made anew), and by an Irish future series. The Homeric future *διδῶ-σω* and Attic conjunctive aorist and future *διδαῖω* can hardly have a direct connexion with these formations.

Very rare indeed are non-thematic forms with reduplication, such as Skr. partic. mid. *dī-dhiṣ-āna-s* beside *dī-dhiṣa-ti* from *√dhē-* 'set, lay'.

§ 667. Aryan. The Desiderative type is very prolific in Sanskrit.

*√ster-* 'sternere' Skr. *ti-stīr-ṣa-tē*. *√yen-* 'win, like' Skr. *vī-vā-sa-ti*, where *-vā-* = *\*-vṛ-*; in *jī-ghā-sa-ti* (*√ghen-* 'strike') *mī-mā-sa-tē* (*√men-* 'to think') and some other words the nasal came in afterwards by analogy, as it did in *vāñcha-ti* instead of *\*vācha-ti* § 671. *√geḥ-* 'compel, subdue' Skr. *jī-gī-ṣa-ti*. *√kleṣ-* 'hear' *śū-śrū-ṣa-tē*, cp. *śrō-ṣa-ti* § 659 p. 193. *√gheu-* 'pour, offer' Skr. *ju-hū-ṣa-ti*. *√derk-* 'see'

Skr. *dī-dṛk-ṣa-tē*. √ *ueṣid-* 'see, know' Skr. *vi-vit-sa-ti*, cp. Lat. *visō* § 662 p. 197. √ *meuq-* 'loose, set free' Skr. *mū-muk-ṣa-ti*, cp. *mōk-ṣa-tē* § 659 p. 194. √ *dhegh-* 'burn' Skr. *dī-dhak-ṣa-ti*. *badh-* 'press' Skr. *bī-bhat-sa-tē*. √ *dō-* 'give' Skr. *dī-t-sa-ti dī-dā-sa-nt-*. √ *dhē-* 'place, lay' Skr. *dhī-t-sa-ti dī-dhi-ṣa-ti*. From *gñē- gñō-* 'noscere' √ *gñen-* (§ 587 p. 128) Skr. *jī-jñā-sa-te* Avest. *zī-šndrōhemna-* (as regards *-šn-* see I § 403 p. 298).

On the reduplication of Skr. *īkṣa-tē* (unreduplicated O.Pers. *patiy-axšaiy* 'I inspect'), *īpsa-ti* 'tries to reach' (unreduplicated *apsa-nta*), *īrtsa-ti* 'wishes to advance or promote', see § 473 p. 17. Ved. *īyakṣa-ti* 'wishes to honour' may be regarded as regular for *\*yi-yakṣa-*, since *yi-* doubtless became *i-* as *yu-* became *u-* (I § 157 p. 141); the forms *yi-yakṣa-ti yi-yāsa-ti* are reformates following *si-sarṅkṣa-ti* etc., just as beside the regular *ur-āṇá-s* we find the re-formate *vur-i-ta*.<sup>1)</sup> The form *in-akṣa-ti* 'seeks to gain' is peculiar, cf. perf. *an-āś-a*.

Roots beginning and ending in a consonant, and containing no *i*, *u*, liquid, or nasal, drop the initial consonant after the reduplicator if the root does not form a syllable by itself (cp. Lat. *discō* for *\*di-tc-scō* § 678). Skr. *śīkṣatē* 'learns' Avest. *a-siṣšant-* 'not learning' for pr. Ar. *\*ši-śk-ša-* beside Skr. *śak-nō-ti* 'is able'; for the loss of the sibilant cp. aor. *vṛkṣi* for *\*vṛšk-ṣi* and the fut. *vṛakṣyā-nt-* for *\*vṛask-ṣya-nt-* (beside *vṛścā-ti* 'tears to pieces' *pra-vṛask-a-s* 'slice, cut' O.C.Sl. *vṛaska* 'wrinkle'). Similarly *dīpsa-ti dhīpsa-ti* Avest. *diwōša-idyāi* beside Skr. *dābh-a-ti* 'injures', Skr. *bhīkṣa-tē* 'begs' beside Skr. *bhāj-a-ti*, *līpsa-tē līpsa-tē* beside *labh-a-tē* 'seizes, grasps' and others of the same sort. Some of these forms are certainly irregular. Instead of Skr. *pitsa-ti*, for example (from *pat-* 'fly, fall') we should expect *\*pipsa-ti*, to judge from Avest. *naṣṣu* for *\*nāpsu* (I § 471 p. 348).

On the analogy of the forms here mentioned arose Skr.

1) The *i-* of *i-yakṣa-ti* is different from that of *i-yāja*, see § 851.

*hīsa-ti* 'injures, hurts' from *han-* (*ghen-*), whose 3<sup>rd</sup> pl. *hīsanti* caused the coining of a sing. *hinās-ti* following Class XV (the 3<sup>rd</sup> sing. *hīs-tē* is perhaps like *dīdhiṣ-āṇa-s* § 660), and further perf. *ji-hīs-a* etc.

Instead of *-sa-* after roots with final consonant, the Sanskrit has often *-iṣa-* (*-ṣo-*).  $\sqrt{qel-}$  'to move' *ci-cariṣa-ti* (beside *cicarṣa-ti*).  $\sqrt{ḡen-}$  'gignere' *jī-janiṣu-tē*.  $\sqrt{meld-}$  'crush' *mi-mardiṣa-ti*. *vi-vidiṣa-ti* beside *vivitsa-ti* (see above). *bi-badhiṣa-tē* beside *bī-bhatṣa-tē* (see above).

The productive power of this desiderative type in Sanskrit is especially clear in forms like *ti-tarpayiṣa-ti* *pi-pāyayiṣa-ti* from the causals *tarpāya-ti* (from *trp-ñō-ti* 'satisfies itself') *pā-yāya-ti* (from *pā-ti* 'drinks').

The desiderative formation was itself often the foundation for a comprehensive verb structure; thus from *bhikṣa-tē* were formed perf. *bi-bhikṣē* fut. *bhikṣ-iṣya-tē* caus. *bhikṣ-aya-ti*, and from *mī-mā-sa-tē* were formed aor. *á-mīmāṣ-iṣṭa* pass *mīmāṣ-yá-tē*.

§ 668. Keltic. O.Ir. *nō-gigius* 'I will pray or ask' for \**gi-get-sō* beside *gess-* from *-guidiu*, § 663 p. 197. *fo-lilus-[s]a* from *fo-long-* 'bear, endure'. Compare Zimmer, Kuhn's Zeitschr. xxx 128.

## F. CLASSES XXII AND XXIII.

### PRESENT STEMS WITH *-sko-*.

§ 669. The *-s-* of *-sko-* I regard as the same element which we have discussed under Classes XIX—XXI; and *-s-ko-* I believe to be an extension like *-s-ḡo-*. Compare \**meḡk-sk-* Lat. *misceō* and \**meḡk-s-* Skr. *mēkṣaya-ti* perf. *mi-mikṣē* from  $\sqrt{meḡk-}$  'mix'; Lat. *dis-pescō* for \**-perc-scō* and Skr. *pṛk-ṣ-* (see Grassmann, Wtb., s. v.); Gr. *δι-δά(κ)-σχω* 'I teach' and Avest. *dax-ša-t* 'he taught'; Skr. *ḡ-chá-ti* 'reaches, hits, attains', and *ḡ-ṣá-ti* *ár-ṣi-ti* 'moves quickly'

Avest. *yā-sa-iti* 'goes, goes on' and O.C.Sl. *ja-cha-ti* 'vehi'; Mid.H.G. *lū-sche* 'I lurk, watch for' (O.H.G. *\*hlū-skē-n*)<sup>1</sup>) and O.H.G. *lū-s-trē-n* 'I listen, obey' *hlo-sē-n* 'I attend, listen to' Skr. *śrō-ṣa-ti śū-śrū-ṣa-tē* from  $\sqrt{k}leu$ - 'hear'; Armen. *ba-çi* 'I opened' Gr. *φά-σκω* 'I make known, say' and Skr. *bhāsa-ti*; Gr. *γνώ-σκω γι-γνώ-σκω* Lat. *(g)nō-scō* and Lat. *gnō-ri-tur* 'cognitum sive compertum est' (Stolz, Lat. Gr.<sup>2</sup> p. 375) Skr. *ji-jñā-sa-tē* from *gnē- gnō-* 'learn', and others. In view of these, we may derive Lat. *mix-tu-s mis-tu-s* beside *misceō*, *dis-pes-tu-s* beside *dis-pescō*, *pos-tulō* Osc. *pes-tlú-m* 'templum' beside *poscō poposcē* and doubtless Skr. *pr̥ṣ-tá-s prāṣ-tum* beside *pr̥chá-ti papracha* from stems with no other extending suffix but *-s-*, *\*meṣk-s-* and so forth; and we need not regard Avest. *ter'sa-iti* 'is afraid' Lith. *triszu* 'I tremble, shudder' as being *\*ty-s + sko-* (cp. Skr. *tr-āsa-ti* etc., § 657 p. 192), but must regard it as *\*ty-s-ko-*. The compound suffix *-esko-* in O.Pers. *a-r-asa-m* 'I came, arrived at' beside Skr. *r-chá-ti*, in Avest. *iš-asa-iti* 'wishes' beside Skr. *ichá-ti*, in Gr. *ἀρε-σκω* 'I please' *φεύγε-σκω* 'I fled' corresponds to *-eso-* in Skr. *tr-āsa-ti tar-āsa-ti* and others (§ 655 p. 189, § 657 p. 192, § 659 p. 195).

*-k-* or *-kh-* (see below), without *-s-* preceding, seems often to occur in Greek words. The parallel diminutive suffixes Boeot. *-ιχο-ς* and Att. *-ισκο-ς*, and a comparison of *πτώ-ξ πτω-κ-ός*, *πτω-χός* (*πτώσσω*), with *πτω-σκ-άζω*<sup>2</sup>), and of *γλί-χο-μαι* 'I stick, adhere' with *γλί-σχο-ς*, justifies our assuming *-kho-* to be the suffix of *γλί-χο-μαι*, of *νή-χω* 'I swim', of *σμή-χω* 'I rub, stroke, wipe off', and *σμώ-χω* 'I rub or grind to powder', for *ψή-χω* 'I stroke, curry' and *ψώ-χω* 'I grind to powder', for *τρε-χω* 'I rub away, wear out', and for *στεν-άχω* 'I groan' (cp. *πλάθω* and such like words, § 694). In the

1) Connected, as it would seem, with Armen. *lsem* 'I hear' for *\*klu-sko-*. See Hübschmann, Arm. Stud. I 33; Bartholomae, Stud. Idg. Spr., II 41.

2) Compare Bugge, Kuhn's Zeitschr. XXXII 39 f., on Armen. *tsk-nu-m* 'I hide myself, which is in any case a cognate word.

parallel group come verbs in *-σσω* such as *πτή-σσω ἐγρή-σσω ὀνειρώ-σσω*; see § 763 Rem.

It appears that *-sko-* and *-skho-* were used as variants in the parent language. Sanskrit has only *-skho-* (unless perhaps *-sko-* is the suffix of *वृश्च-ति* 'tears to pieces'), but both of them seem to occur in Armenian and Greek. Armenian has *-sko-* in *lsem* 'I hear' (see p. 201 footnote), *-skho-* in *harçanem*; Greek has *-sko-* in *βά-σκε*, and *-skho-* perhaps in *πάσχω* (see § 673), *γλίσχ-ος* (cp. *γλί-χο-μαι* etc., above).

The *k*-sound was sometimes palatal and sometimes velar in the original language. *-sk(h)o-* is pointed to by Avest. *ter'sa-iti*, Lith. *triszu*, Armen. *lsem harçanem*; and *-sq(h)o-* by Skr. *mārkhá-s* (beside *mārcha-ti*) Avest. *per'ska* (beside *per'sa-iti*, cp. Bartholomae, Stud. idg. Spr. II 49 f.), Armen. *alaçem*, Lith. *jėszkó-ti* O.C.Sl. *iska-ti*, Lith. *treszkù* O.C.Sl. *trěskù troska*; cp. Lith. *twiska* 'it lightens' beside Skr. *twiṣ-* 'beam, light' Avest. *ḫwis-ra-* 'sparkling'. The variation of guttural in *-ko-* and *-qo-* has already been touched upon in our discussion of Noun Morphology, II § 90 pp. 274 f. Compare however vol. I § 414 pp. 303 f., § 587 Rem. 2 p. 442, and Bartholomae, *op. cit.* 48 f.

On the difficult question of the original shape of the *sk*-suffix we have a new paper by Zubatý, in Kuhn's Zeitschr., xxxi 9 ff.

## Class XXII.

Root + *-sko-* *-esko-* forming the Present Stem.

§ 670. Pr.Idg. In the following sections, I write the original forms always with *-sko-*, without distinguishing the variants *-sko-* *-sqo-* *-skho-* *-sqho-* (see § 669).

Roots that are capable of vowel gradation generally have the weak grade before *-sko-*.

✓ *ter-* 'move to and fro, tremble' (§ 657 p. 192). \**ty-ske-ti*: Avest. *ter'sa-iti* O.Pers. *tarsa-tiy* 'is frightened', Lith. *triszu*

'I tremble, shudder', cp. § 669 p. 201.  $\sqrt{gem-}$  'go' \**gm-ske-ti*: Skr. *gácha-ti*, Gr. imper. *βάσκε*.  $\sqrt{prek-}$  'precari' \**prk-ske-ti*: Skr. *prchá-ti*, Armen. aor. *harçi*, Lat. *poscō* for \**porc-scō*, cp. O.H.G. *forsca* 'question'.  $\sqrt{aṣ-}$  'desire, wish': Skr. *ichá-ti*, Umbr. *eiscurent* 'poposcerint, arcessierint', O.C.Sl. *iskā* 'I seek, try', cp. Skr. *ichā* 'a desire, wish' Armen. *aiç* 'attempt' O.H.G. *eisca* 'a demand, request' Lith. *jėszkó-ti* 'seek, try'.  $\sqrt{es-}$  'be': Gr. *ἔσκε* 'was', O.Lat. *escō*.  $\sqrt{bhā-}$  'show, make appear' (p. 56 footnote): Armen. *ba-çi* 'I opened', Gr. *γά-σκω* 'I make known, say, affirm'.

From \**ḡn-ē- ḡn-ō-* 'noscere'  $\sqrt{ḡn-}$  (§ 587 p. 128): O.Pers. *xšná-sā-tiy* conj. 'noscat' (I § 403 p. 298), Gr. Epir. *γνώσκω* (cp. Att. *γιν-γνώσκω*), Lat. *gnōscō nōscō*.

Of *-esko-* there no example in more than one language.

§ 671. Aryan. Skr. *r-chá-ti ar-cha-ti* 'hits, reaches, injures' (pluperf. *anarcha-t* § 854)  $\sqrt{er-}$ . Avest. *ter<sup>s</sup>-sa-iti* O.Pers. *tarsa-tiy* 'is afraid': Lith. *trīszu*, see § 670. Skr. *mūrcha-ti* 'congeals, stiffens' (perf. *mumūrcha* etc.), beside partic. *mūrtá-s*. Skr. *hūr-cha-ti* 'slides, glides, falls' (caus. *hūrchaya-ti*), probably from *hvar-* 'lead astray, disturb' (2<sup>nd</sup> sing. mid. *ju-hūr-thās*). Skr. *gá-cha-ti* Avest. *jasā-iti* (*j-* instead of *g-*, see I § 451 Rem. p. 334): Gr. *βά-σκε*,  $\sqrt{gem-}$  'go', see § 670; Skr. *yá-cha-ti* beside *yam-a-ti* 'holds, directs', Avest. *yasaiti*<sup>1)</sup> and *yāsaitē* (the latter for \**iṣi-*); as regards the change of accent in *gácha-ti yácha-ti* (instead of \**gachá-ti \*yachá-ti*) see I § 672 p. 537, IV § 516 p. 82. Skr. *vāñcha-ti* 'wishes' (pass. *vāñch-ya-tē* etc.), which should regularly be \**vā-cha-ti*, ground-form \**uṣ-ske-ti* (cp. desid. *vī-vā-sa-ti*),<sup>2)</sup>  $\sqrt{yen-}$  Skr. *ván-a-ti*, cp. O.H.G. *wun-sc* m. 'wish' (II § 90 p. 276). Skr. *yú-cha-ti* 'keeps afar, wards off' (with irregular accent, which should be

1) Connected perhaps with O.Pers. 3<sup>rd</sup> sing. mid. *ayasaia*, see Bartholomae, *Bezz. Beitr.* xiv 246 f.

2) The same analogical intrusive nasal in *ji-ghā-sa-ti*, see § 667 p. 198.

compared with that of *gīrāmi* beside *gīrdmi*, and its like, § 516 p. 82) beside *yu-yō-ti*. Avest. *šu-sa-iti šū-sa-iti* 'goes, hastens, rushes' ground-form \**qiā-ske-ti* beside Skr. *cyāv-a-tē* (cp. I § 448 p. 333, § 473.4 p. 350). Skr. *prchá-ti* (perf. *papracha* and so forth) Avest. *per'saiti* 'asks' O.Pers. imper. *parsā*: Lat. *poscō*, see § 670. Avest. *ner'f-sa-iti* 'waned, decreases' (of the moon). Skr. *ichá-ti* Avest. *isaiti* 'desires, wishes', √ *aīs-*, see § 670. Skr. *uchá-ti* Avest. *usaiti* 'shines, flashes up' from Ar. *yas-* 'shine', cp. Lith. *aūszo* 'it dawned' where *sz* = *sk̃*. Avest. *xwafsa-iti*; √ *suep-* *sup-* 'sleep'; *tafsa-iti* √ *tep-* 'to warm', cp. Lat. *tepescō*; for the *fs* in these two present stems cp. Bartholomae, Bezz. Beitr. XIII 74 f. Avest. *yāsa-iti* 'goes, begins' beside Skr. *yá-ti*. O.Pers. *xšnāsā-tiy* conj. 'noscat': Gr. *γνώσκω* etc., see § 670. Avest. *xwīsaiti* 'sweats' for \**xwitsa-* (I § 473.2 p. 349) from √ *sueid-* may be one of the same class of forms, or it may contain *-so-* like *vax-sa-iti*, § 659, p. 194.

*-esko-* (§ 669 pp. 200 f.) only in Iranian. O.Pers. *a-r-asa-m* 'I came, reached' conj. *ni-rasātiy* beside Skr. *r-chá-ti* √ *er-*. Avest. *iš-asa-iti* 'wishes' beside *isa-iti* Skr. *ichá-ti* √ *aīs-*; cp. acc. *išase-m* 'a wish'. Avest. *hīš-asa-iti* 'has authority over, arranges, understands', √ *ar. saiš-*.

§ 672. Armenian. Here it seems that Idg. \**-skh(o)-* has become *-ç-*, *-sk̃(o)-* has become *-s-*, and *-sq(o)-* or *-sqh(o)-* has become *-ç-* (cp. § 669 p. 201).

(1.) *-ç-* in aorist and present both: *harçi* 'I asked' pres. *harçane-m* (§ 620 p. 157): Skr. *prchá-ti* etc., see § 670 p. 203; it seems to me questionable whether Bugge is right in connecting *ançi* 'I went' (pres. *ançane-m*) with Skr. *gácha-ti* (Kuhn's Zeitschr. XXXII 33). Again, compounded aorists with *-ç-*, or *-aç-* *-eaç-*. *ba-çi* 'I opened' (pers. *ba-na-m* § 601 p. 144): Gr. *φάσχω*, see § 670 p. 203. *mna-çi* 'remained, awaited' (pres. *mna-m* § 581 p. 122), stem. *mnā-* from √ *men-*: cp. Gr. *μυμνήσχω*. *l-çi* 'I filled' 3<sup>rd</sup> sing. *e-li-ç* (pres. *l-nu-m* § 642 p. 180), stem *li-* = \**plē-* from √ *pel-*. *ke-çi* 'I lived' (pres. *kea-m* § 581 p. 122) from √ *gei-*: similarly Gr. *ἀνα-ζωοποιῶμαι* 'I revive'. The aorist in *-açi*, as *gitaçi* 'I knew'

(pres. *gitem*), and *-eçi* (3<sup>rd</sup> sing. *-eaç*), as *lizeçi* 'I licked' (pres. *lizem*) seem to be of the same character as Lat. verbs in *-āscō -ēscō -īscō* and Greek in *-ασκω -εσκω*.

But it must be admitted that an explanation is to seek why this present suffix came to be used with the aorist, and as an aorist suffix became productive. Something of the same sort happened in Greek with the *to*-suffix; for *harçi*: *harçane-m* = *ἔ-βλασ-το-ν*: *βλαστ-άνω*, see § 682. It would follow that first *harçi* as compared with *harçanem* got the aorist use; and afterwards *baçi* and others like it were used in the same way. But the problem must remain unsolved so long as the history of the Idg. *s*-aorist in Armenian has not been traced.

(2). *lsem* 'I hear' doubtless for *\*klu-skō-* cp. Mid.H.G. *lūsche* 'I lurk, listen, play eavesdropper', § 669 p. 201.

(3) *-ç-* for *-sq-* or *-sqh-* in present stems with *-açe-m*, as *alaçem* 'I beg, pray', and in other compound suffixes (Hübschmann, Arm. Stud. I 94).

§ 673. Greek. *βά-σκε βά-σκε-τε* 'go thou, go ye': Skr. *gá-cha-ti*,  $\sqrt{\text{gem-}}$ , see § 670 p. 203. *προ-βλώσκω* 'I come forth' for *\*m[̥]-skō*. *ἀνα-βρώσκων· κατεσθίων* (Hesych.) for *\*g[̥]-skō* (cp. *βιβρώσκω* § 678); *θρῶ-σκω* 'I leap' for pr. Gr. *\*th[̥]-skō*; cp. Skr. *hūrcha-ti mūrcha-ti* § 671 p. 203. *λάσκω* 'I make a sound, cry out' for *\*lak-skō*, beside *ἔ-λακ-ο-ν*. *ἴσκω* 'I make like, consider like' for *\*fik-skō*, also redupl. *ἑ-ίσκω* § 678, beside *ἔοικα*,  $\sqrt{\text{ueik-}}$ . *μίσγω* 'I mix' instead of *\*μισκω* for *\*mik-skō* ( $\gamma$  instead of  $\kappa$  following *μίγνῃμι ἐμίγην*),  $\sqrt{\text{meik-}}$  *meig-*: cp. Lat. *misceō*, O.Ir. *con-mescatar* 'miscetur'. *ἐν-θύσκω· ἐντυγχάνω* Hesych. for *\*θυκ-skō*, cp. fut. *συν-θύξει· συναντήσῃ* Hesych., beside *ἔ-τυχ-ο-ν* (cp. Osthoff, Perf. 304 f.). El. *πάσκω* 'I suffer, experience' i. e. *\*πα(θ)-σκω* beside *ἔ-παθ-ο-ν πένθ-ος*; Att. etc. *πάσχω*, which seems to be built up with *-skho-* (§ 669 p. 202).

*φά-σκω* 'I make known, assert, say': Armen. *ba-çi*,  $\sqrt{\text{bha-}}$ , see § 670 p. 203. *χά-σκω* 'I gape, yawn', beside *ἔ-χαν-ο-ν χή-μη*, see § 611 p. 150. *βό-σκω* 'I feed, pasture' beside *βώ-τωρ*.



Epir. *γν-ώ-σκω* (Att. *γι-γνώ-σκω*) 'I get to know, learn': O.Pers. *xšnā-sā-tiy* etc., see § 670 p. 203. *ρή-σκο-μαι* 'I say' stem *ῥε-*, *✓μερ-*. *θρ-ή-σκω* νοῶ, *θρά-σκειν* ἀναμνησκειν Hesych., cp. Curtius Gr. Etym.<sup>5</sup> 257. In *θνή-σκω* Dor. *θνά-σκω* 'I die' there is doubtless not really an *a*-suffix, as it may come from *✓ghen-* by way of *\*ghē-skō* = *\*φᾱ-σκω* (Osthoff, *op. cit.* 366 f.).

Att. *θρώ-σκω*, *θρή-σκω* Aeol. *θναί-σκω* Ion. *χρηῖσκομαι* have altered slightly in form by analogy of *-ισκω* (*εύρ-ίσκω* etc.), from which they get *ι*; the same may be said of Att. *μυμή-σκω* Aeol. *μυμναί-σκω* (§ 678).

*ἀρέ-σκω* 'I please'. *κορέ-σκω* 'I satisfy'. *γηρά-σκω* 'I grow old'. *γενειά-σκω* 'I grow a beard'. *μεθύ-σκω* 'I make drunk'.

Ionic iterative preterite: *φεύγεσκον* from *φεύγω* 'I flee', *ἐρίζεσκον* from *ἐρίζω* 'I strive', *βοσκεισκόμην* from *βοσκω* 'I pasture', *εἶπεσκον* from *εἶπον* 'I said', *αὐδήσασκον* beside *αὔδησα* 'I spoke, said', *φάνεσκον* beside *ἐφάνην* 'I appeared'. As a possible course of the developement I suggest the following. The first step was, on the analogy of *φη-μί*: *φά-σκω* *φά-σκον* to form *ῖστασκον* from *ῖστημι*; again *ἦρεσα*: *ἄρε-σκω* *ἄρεσκον* produced *κυλεσκόμην* beside *ἐκάλεσα*; and *γενειάζω*: *γενειά-σκω* *γενειάσκον* gave rise to *ῥίπτασκον* from *ῥίπτάζω*, and so forth. Each of these has its direct analogue; the next step was to form similar iterative preterites from stems which offered no such analogue among forms with *-σκο-*.

The origin of *-ισκω* in forms like *εύρί-σκω* 'I find' *άλίσκομαι* 'I am caught' is not quite clear; compare the reduplicated *ἄρ-αρ-ίσκω* 'I join'. I now offer a new conjecture, and give up that which was suggested in vol. II § 90 p. 275. My present view is that *ι* is the same in this suffix as in *ὀρί-ννω* *ὀρίνω* *ἀγίνω* (§§ 650, 652 p. 186), that is to say, it is the "root determinative" *-i-*. Then we analyse *ἀραρί-σκω* as *ἄρ-αρί-σκω*, and connect it directly with *ἀρι-θμός* *νή-ρι-τος* O.H.G. *r-i-m* 'row, series, number'. See further in § 841, on *αἰσθω* 'I breathe', for *\*ἄf-i-σθω*, and others of the same kind.

§ 674. Italic. Lat. *hī-scō* (beside *hiā-scō*), beside *hi-ā-re* O.H.G. *gi-nō-m* O.Icel. *gī-n* (§ 605 p. 146, § 608 p. 147). *gī-scō*, beside Skr. *gráy-a-ti* (I § 402 p. 297). *scī-scō*, beside *sciō*. *nāscor* for *\*gnā-scō(r)*, ground-form *\*gñ-scō*, √ *gñ*- (I § 253 p. 206). *poscō* for *\*porc-scō*: Skr. *prchá-ti* etc., see § 670 p. 203. *com-pescō dis-pescō* for *\*perc-scō* or *\*parc-scō*, Osc. *com-parascuster* 'consultus erit' beside O.Lat. *comperce* 'compesce' (Paul. D.) Osc. *kú]m-parakineís* 'consilii' or 'convocatae contionis', doubtless connected with Skr. *parc-* 'mix, blend, unite, give in fullness' (*sam-parc-* 'communicare quid cum quo').<sup>1)</sup> *miscō* is doubtless derived from *\*miscō* (§ 802) Gr. *μίσγω*, see § 673 p. 205. Umbr. *eiscurent* 'poposcerint, arcessierint': Skr. *ichá-ti* etc., see § 670 p. 203. *vescōr* for *\*vē-ēscōr* i. e. *ēd+scō(r)*, √ *ēd-*, cp. *vēscu-s* and *ēzca* (II § 90 pp. 275 f., G. Meyer in the Lit. Centralbl. 1890, col. 1513). *pō-scō* 'I drink' Cic. Verr. II 1.66 (Stowasser, Wiener Stud. XII 326 f.), cp. *pō-sca*. *pā-scō*, perf. *pā-vī*.

In *pos-tulare* Osc. *pes-tlúm* 'templum' Umbr. *pes-klum* 'supplicationem, sacrum' (*-klo-* for *-tlo-*, I § 367 p. 278),<sup>2)</sup> *dis-pes-tu-s*, *mix-tu-s* *mis-tu-s*, and *pās-tu-s*, the group *-st-* need not be derived from *-sk-t-*. Compare O.H.G. *lū-s-trē-n* as compared with Mid.H.G. *lū-sche* etc., § 669 p. 201. This guides us in our view of Umbr. *persnimu imper.* 'supplicato', derived from an abstract *\*persni-* (§ 777) made with the suffix *-ni-* (II § 95 p. 286).

*gn-ō-scō nō-scō*, pf. (*g*)*nō-vī*: O.Pers. *xšnā-sā-tiy* etc., see § 670 p. 203. *cr-ē-scō*, pf. *crē-vī*. *qui-ē-scō*, pf. *quiē-vī*, cp. Avest. *šyē-iti-š* O.Pers. *šiyā-ti-š* II § 100 p. 297. *vi-ē-scō*, part. *viē-tu-s*, cp. Skr. *jyā-nī-š* 'frailty, frailness, weakness of old age' (not so Per Persson, Stud. Lehr. Wurzelw., 79).

1) *dis-pescō* was merely coined to express the opposite of *com-pescō*, as *dis-jungō* as the opposite of *con-jungō*. Compare the Author, Idg. Forsch. I 175. — Is Osc. *parak-* for *\*prak-* = *\*pṛk-* or for *\*prāk-* *\*pṛk-*? See a new treatment by Buck, Der Vocalismus der osk. Spr., 140.

2) Umbr.-Osc. *perk-* is a contamination of *pork-* and *prek-* (Lat. *po(r)scō* and *precārī*).

*rub-ē-scō* beside *rub-ē-s* O.C.Sl. *rūd-ē-ti*, *con-tic-ē-scō* beside *tac-ē-s* O.H.G. *dag-ē-s*, and others, see § 590 p. 132. *hi-a-scō* beside *hi-a-s* *hi-a-tu-s* Lith. *ži-ó-ju* 'I open my mouth', cp. *hi-scō* above.

A large number of new forms, the Inchoative or Inceptive Verbs, were produced by the analogy of *sci-scō* : *sciō*, *rub-ē-scō* : *rubēō*, *hi-a-scō* : *hiō* and similar parallel stems from one root. Examples of these are *obdormiscō* from *dormiō*, *flāv-ē-scō* from *flāveō*, *am-ū-scō* from *amō*. By degrees the endings *-iscō* *-ēscō* *-āscō* grew quite independent of the character of the stem to which they were affixed, and we get such forms as *conticiscō* *mītiscō*. The inceptive meaning was probably not due to anything in the suffix *-sco-*, but arose from the fact that certain verbs which had it, *crēscō* *ad-olēscō* to wit, of necessity implied an inceptive meaning. These verbs suggested a distinction, which was carried on into others, and the inceptive type arose; hence *caelum rubescit* was distinguished from *caelum rubet*, and so forth. In late Latin these verbs had a causal meaning, e. g. *innotēscō* 'I become known', later 'I make known'. On this see Sittl, *Arch. Lat. Lexicogr.*, I 516 ff.

**Remark.** It is very doubtful whether the Italic branch had forms with Idg. *-eskō* or forms like Gr. *ἐσθλῶν*. See Sittl, *op. cit.*, pp. 490 ff., Osthoff, *Perf.* 157, 257 f.

§ 675. Keltic. Only a few present stems have *-sko-*. O.Ir. *nascim* 'I bind' perf. *ro nenasc-sa*, beside *nasc* 'ring' O.H.G. *nuschia* 'clasp, buckle, brooch',  $\sqrt{\text{nedh-}}$ , ground-form  $\sqrt{\text{ndh}} + \text{sko-}$  (see Osthoff, *M. U.* v p. vi). *faiscim* (which has adopted *io*-flexion) Mod.Cymr. *guasgaf* 'I press, squeeze', possibly akin to Skr. *vah-a-tē* 'presses, squeezes'. With *a*-flexion *con-mescatur* 'miscentur' (inf. *do mescad*), beside Gr. *μίσγω*  $\sqrt{\text{meiġk-}}$ , § 673 p. 205.

§ 676. Germanic. Only a few present stems have *-sko-*. O.H.G. *ir-lisku* 'I am extinguished', originally probably 'I lay

myself down', ground-form *\*legþ+skō*, beside Goth. *ligu* 'I lie'.<sup>1)</sup> Mid.H.G. *krische* 'I shriek' pr. Germ. *\*krūt-skō*, beside Mid.H.G. *krīze* 'I shriek'. O.H.G. *wascu* 'I wash' probably pr. Germ. *\*wat-skō*, beside Skr. *unád-mi* 'I wet' Goth. *vatō* O.Ir. *usce* 'water'. Less certain is Goth. *þriska* O.H.G. *driscu* 'I thresh, thrash', which is compared sometimes with Lith. *treszkù* 'I crackle, crack, crash' O.C.Sl. *trěskû* 'noise, crash' *troska* 'thunder-clap', and sometimes with Gr. *ῥιῖβω* 'I rub' (Idg. *\*trǵō* according to Thurneysen, Kuhn's Zeitschr. xxx 352). If we connect *þriska* with Lat. *terō* (Benfey, Gr. Wurzel-lex., II 263), it might be derived from *\*tr-eskō* and compared with O.Pers. *a-r-asa-m* Gr. *ἀρ-έ-σσω* etc. (§ 669 p. 201). Lastly, it seems we must place here Goth. *ga-þrisqa* 'I bear fruit, *τελεισφορῶ*', which Diefenbach connects with A.S. *wridan* 'to grow' and Skr. *vardh-* 'to grow' (Vergl. Wörterb. der Got. Spr., I 241).

Many present stems with *-sko-* have weak inflexion, and apparently were derived from *sko*-nouns. O.H.G. *wunsc(i)u* 'I wish' from *wunsc* 'a wish': Skr. *vāñcha-ti*, see § 671 p. 203. O.H.G. *zusc(i)u* Mid.H.G. *züsche* 'exuro, oburo', beside Skr. *du-nō-ti* 'burns'. Mid.H.G. *lūsche* 'I lurk, play eavesdropper' beside O.H.G. *lū-s-trē-n* 'I listen, obey', *✓kley-* 'hear' (cp. § 669 p. 201). O.H.G. *forscō-n* 'I ask' beside *forsca* 'enquiry, question': Skr. *prchá-ti* etc., see § 670 p. 203. O.H.G. *eiscō-n* 'I ask, demand' beside *eisca* 'request, demand': Skr. *ichá-ti* etc., see § 670 p. 203. Mid.H.G. *rūsche* 'I rush, roar', beside A.S. *hrūte* 'I rush, roar, snore'. Mod.H.G. *haschen* 'to snatch' = Goth. *\*haf-skōn* from *haf-* 'capere'. Very uncertain is the comparison of Goth. *and-hruska* 'I investigate, attempt, essay' 3<sup>rd</sup> sing. *-hruskái-þ* with Lat. *scrūtāri*; see I § 527 p. 383, and Fick, Bezz. Beitr. VII 95 (Thurneysen, Kuhn's Zeitschr. xxx 352 f.).

§ 677. Balto-Slavonic. Here too this class of present stems has quite fallen into the background. We find sometimes

1) According to Osthoff (Wiener Stud. x 174) for *\*les-skō*, akin to Mid.H.G. *er-leswen* 'to grow weak'.

Lith. *-sz-* O.C.Sl. *-s-* = Idg. *-sk-*, and sometimes Lith. *-sk-* (*-szk-*) O.C.Sl. *-sk-* = Idg. *-sq-*, see § 669 pp. 201 f.

Lith. *tvíska* 'flickers, lightens', cp. Avest. *ḫwisra-* 'gleaming, shining'. Lith. *treszkù* 'I crackle', cp. § 676. O.C.Sl. *iskā* 'I try': Skr. *ichā-ti* etc., see § 670 p. 203, cp. Lith. *jėszkaũ* 'I try' inf. *jėszkó-ti* (like O.H.G. *eiscōn*) and O.C.Sl. *ištā* 'I try' for *\*isk-ia* (I § 147 pp. 133 f.).

In addition, compare Lith. *aũszo* 'it dawned' (pres. *aũsz-ta*), beside Skr. *uchā-ti*, § 671 p. 204; *gaiszaũ* 'I loitered, tarried' (pres. *gaisz-tũ*), beside Lat. *haereō*; *driskaũ* 'I am torn in pieces' possibly from the  $\sqrt{\text{der-}}$  whence *nu-dirta-s* 'flayed' Gr.  $\delta\acute{\epsilon}\rho\omega$ .

It is impossible to decide whether the sibilant in Lith. *su-miszaũ* 'I meddled, mixed myself with, got into confusion' (pres. *su-misztũ*), *maiszy-ti* O.C.Sl. *měsi-ti* 'to mix' from  $\sqrt{\text{mej-k-}}$  represents Idg. *-k-* or *-k-s-* (cp. Skr. *mēkṣaya-ti*) or *-k-sk-* (cp. Lat. *misceō* etc.).

### Class XXIII.

Reduplicated Root + *-sko-* forming the Present Stem.

§ 678. This type is demonstrable only in Greek and Italic. Gr.  $\delta\iota\delta\acute{\alpha}\sigma\kappa\omega$  'I teach' for *\*ḍi-ḍak-skw* cp. perf.  $\delta\epsilon\text{-}\delta\acute{\iota}\delta\alpha\chi\text{-}\alpha$   $\delta\epsilon\text{-}\delta\acute{\iota}\delta\alpha\chi\text{-}\mu\alpha\iota$ , Lat. *discō* for *\*di-tc-scō* cp. perf. *didic-i*, cp. Avest. *dax-ša-t* 'I taught' § 669 p. 201. In *discō* the root syllable is treated exactly as it is in Sanskrit desideratives of the type *śikṣatē*, see § 667 p. 199. For the  $\alpha$  of  $\delta\iota\delta\acute{\alpha}\sigma\kappa\omega$  cp. Bartholomae, Bezz. Beitr. xvii 121.

Lat. *discō* is isolated in Italic; but Greek gives a number of reduplicated forms besides  $\delta\iota\delta\acute{\alpha}\sigma\kappa\omega$ .

With *i* as the reduplicating vowel:  $\tau\iota\text{-}\tau\acute{\upsilon}\sigma\kappa\omicron\mu\alpha\iota$  'I make, prepare' ( $\tau\epsilon\text{-}\tau\acute{\upsilon}\sigma\kappa\epsilon\tau\omicron$  Hesych.) for *\*ti-tuk-sko-*, beside  $\tau\acute{\upsilon}\kappa\text{-}\omicron\varsigma$  'hammer, pick' Skr. *tōk-man-* 'shoot, sprout'.  $\beta\iota\text{-}\beta\rho\acute{\omega}\text{-}\sigma\kappa\omega$  'I eat, swallow', cp.  $\beta\rho\acute{\omega}\text{-}\sigma\kappa\omega$  for *\*gṛ-scō* § 673 p. 205.  $\gamma\iota\text{-}\gamma\acute{\nu}\omega\text{-}\sigma\kappa\omega$  'nosco', cp. Epir.  $\gamma\acute{\nu}\omega\text{-}\sigma\kappa\omega$  § 673 p. 206.  $\mu\iota\text{-}\mu\acute{\nu}\eta\text{-}\sigma\kappa\omega$  'I remind,

mention' beside Armen. *mna-çi* § 672 p. 204. *δι-δρά-σκω* Ion. *δι-δρῆ-σκω* 'I run'. On the iota of Att. *μιμνήσκω* Aeol. *μιμναίσκω* see § 673 p. 206.

Reduplicated with *ε*: *τε-τύσκετο* beside *τι-τύσκομαι*, see above. *ἐ-ίσκω* 'I make like' for *\*Fε-Fι(x)-σκω* beside *ἴσκω* § 673 p. 205. *δε-δί-σκομαι* 'I fear, am terrified' from *√dyei-* (cp. Osthoff, Perf. 388 ff.).

*ἀρ-αρ-ίσκω* 'I join', like *ἐνρ-ίσκω* § 673 p. 206.

#### G. CLASS XXIV.

##### ROOT + *-to-* (*-t-*) FORMING THE PRESENT STEM.

§ 679. The suffix *-to-* in verbs is often just as clearly the same as the noun suffix (II §§ 79 ff. pp. 218 ff.) as we found to be the case with *-no-*, *-so-*, and *-sko-*. Compare Gr. *ἐ-βλασ-το-ν* with *βλασ-τό-ς βλάσ-τη*.

Non-thematic forms are very rare, and only Aryan, so that I cannot set apart a class for this group alone. Skr. *dyu-t-ānā-s* beside *dyā-ta-tē* 'shines', *á-cē-t-i* *ct-t-ānā-s* beside *cē-ta-ti* 'takes notice of, observes', *yá-t-ānā-s* *ya-t-ānā-s* beside *yá-ta-tē* 'joins itself, strives'. Compare the nouns *dyā-t- ct-t-ya-t-*, which belong to the same kind as *rt-t- hrít-t-* II § 123 p. 391; the connexion of the noun suffixes *-t-* and *-to-* is obvious.

*-to-* is confined to the present stem only in Greek, Italic, and Baltic, and there not always.

§ 680. Pr. Idg.<sup>1)</sup> *\*sp(h)l-tō* *\*sp(h)l-tō* from *√sp(h)el-* 'burst, split' (Skr. *phál-a-ti* 'bursts, splits in two'): Skr. *sphuṭa-ti* (secondary form *sphōṭa-ti*) 'bursts' (cp. *sphaṭita-s* partic. 'split, burst'), O.H.G. *spaltu* 'I split' (cp. Goth. *spīlda* 'writing tablet'

1) In Per Persson's work on *Wurzelerweiterung*, pp. 28 ff., the determinative *t* is assumed for many instances not here given; amongst others, for those in which we have held that *t* is part of the root proper: e. g. Skr. *karta-ti* 'cuts' Lith. *kertù* 'I hew, cut', which are derived from the root of Gr. *καίρω*; and Skr. *várta-tē* 'vertitur' Lat. *vertō*, which are derived from the root of Lat. *ver-mi-s*.

Mid.H.G. *spelte* 'lance splinter'. From  $\sqrt{qe\dot{x}}$  (Skr. *ci-nō-ti* 'ranges side by side, puts in layers, directs one's notice towards'): Skr. *cē-ta-ti* 'takes note of, observes', O.C.Sl. *čr-te-tŭ* 'counts, reads, honours', cp. Skr. *ct-t-āna-s* § 679. Lat. *plec-tō* 'I twist, twine' beside *plicō*, O.H.G. *flih-tu* 'I twist' (cp. Goth. *flah-ta* 'a braid, twist'), cp. Gr. *πλεκ-τό-ς* 'woven, twisted' *πλεκ-τή* 'rope, net'; the stem *plek-* which runs through these is itself an extension of a  $\sqrt{pa^x l-}$ , see below. From  $\sqrt{pe\dot{k}}$  (Gr. *πέκ-ω* 'I comb' Lith. *pesz-ù* 'I pluck off, tear off, pull out'): Gr. *πέκτω* (and *πεκτέω* § 801) 'I comb, shear, pluck, pull', Lat. *pec-tō* 'I comb, hackle, hack the ground with a mattock', O.H.G. *fih-tu* 'I fight, do battle' (*feh-ta* 'a fight').<sup>1</sup>) O.H.G. *bristu* O.Icel. *brést* 'I break, tear, burst' is very nearly akin to the O.Ir. weak verb *brissim* 'I break' (-ss- for -st-, I § 516 p. 376), and both must be connected either with Gr. *πέρω* or with Goth. *brika* (cp. Stokes, *Mém. Soc. Ling.*, v 419 ff., Per Persson, *Wurzelerweiterung* 19, 38, and 45); whether *brissim* originally belonged to the first conjugation and then passed into the third, or whether it was originally denominative, is a doubtful point.

In a few words, -e- is interposed between the root and -tō-; cp. Gr. *-σχε-το-ς ἐρη-ε-τό-ν* Skr. *darś-a-tā-s* and the like, II § 79 p. 199; further, Gr. *ἄ(f)-ε-τ-μα ἄ(f)-ε-τ-μό-ν* from  $\sqrt{u\dot{e}}$   $\sqrt{u\dot{o}}$  'blow'.  $\sqrt{m\dot{e}}$ -tō (beside Gr. *ἀμάω* 'I mow, gather' *ἄν-τλο-ν* 'bilge-water', O.H.G. *mā-t* 'math, mowing', Skr. *ám-a-tra-m* 'vessel, jug'): Lat. *metō* (*messui messum*), O.C.Sl. *mete-tŭ* 'turns, verrit' (inf. *mesti*, *sŭ-metŭ* 'dung, manure, ordure'), cp. Mod.Cymr. Mod.Bret. *medi* 'to reap' Mid.Ir. *methel* 'a party of reapers' O.Corn. *midil* 'messor'. O.C.Sl. *pl-e-te-tŭ* 'twines,

1) For the meaning 'fight' compare O.H.G. *roufen* 'pull, pluck', reflex. 'wrestle, fight, out one's way'. Kluge's view, given in his Dictionary, that *fih-tu* is connected with Lat. *pŭg-nus pŭg-nāre*, that from the pl. pret. *fuhtum*, which was regarded as a similar form to *fluhtum*,  $\sqrt{fuhtu}$  was changed to *fih-tu* by analogy of *flihtu*, does not convince my judgement. On the contrary, I regard *fuhtum* as an adformate of *fluhtum*. On O.H.G. *fust*, cited by Kluge, see II § 101 p. 306, III § 164 p. 3.

plaits, braids' (inf. *plesti*) beside Goth. *fal-pa* 'I fold' ground-form *\*pľ-tō*, beside Gr. *δί-πάλ-το-ς* Skr. *puṭa-m* 'a fold' and Gr. *ά-πλό-ς* (III § 182 p. 50), from the same root as *plek-Lat. plicō plectō* (see above). If this view of *pletā* is not accepted we must take refuge in the explanation suggested in vol. I § 545 p. 399. For it is impossible, in my opinion, to derive *pletā* from *\*plektā*, notwithstanding the arguments of Jagić and Miklosich to the contrary (Jagić, Arch. slav. Phil. x 196, and Miklosich, Festgruss an Böhtlingk, 88); compare Kluge, Etym. Wört.<sup>5</sup> s. v. *falten*, and Wiedemann, Lit. Prät. 193.

§ 681. Aryan. Skr. *sphuṭa-ti*, *cé-ta-ti*, see § 680. *naṭa-ti* 'dances, plays' Ved. *ṇṛ-tá-māna-s* (compare *ṇṛtya-ti*), beside *nar-má-s nar-man-* n. 'joke, sport'. *kuṭa-ti* 'curls, twists itself', akin to Lat. *cur-vo-s*. *yá-ta-tē* 'unites with, strives', beside *ya-tá-s* part. of. *yam-a-ti*, cp. *yātāna-s* § 679 p. 211. *dyō-ta-tē* 'shines' *á-dyu-ta-t*, from *dyu-* *div-*, cp. *dyutāná-s* § 679 p. 211. *věš-ta-tē* 'wraps itself up, clothes or shrouds itself' (*věštaya-ti vištítá-s*) beside *veš-ta-s* 'band, cord, covering', which doubtless has nothing to do with *viš-* 'enter', but is connected with Lith. *výs-ta-s* 'woman's bodice, stays' *výstau* 'I swaddle or swathe' a child, from *vei-* 'to wind'. *cěš-ta-ti* 'is in motion' (perf. *cicěšta*) beside *cěš-ta-m* 'motion'. *lōš-ta-tē* 'heaps up' beside *lōš-tá-s lōš-tu-š* 'clod or lump of earth'; if the same root is contained in another *-to*-form, Lith. *lúsz-tu* 'I break' intr. (pret. *lúž-an*), — compare Skr. *lēš-tu-š* 'clod' from *riš-* *liš-* 'tear, break off' — *lōštatē* must be a derivative from the noun, or at least must have modified its meaning in association with (cp. § 794, on Skr. *manáya-ti*).

§ 682. Greek. There are numerous forms in *-π-τω*, and a few which have *-τω* preceded by some other sound than *π*. We begin with the latter. *πέκ-τω* has been mentioned already, § 680 p. 212. *ἐμορτεν* *ἀπέθανε* Hesych., cp. *μορ-τός* 'mortal'. *φάρακ-το-μαι* beside *φράσσομαι* (= *\*φρακ-λο-μαι*) 'I shut myself in, fortify myself'. *ἐ-βλασ-το-ν*, pres. *βλασ-τάνω* 'I spring up, arise' (*βλασ-τός* 'shoot, bud'), orig. probably 'I get high' (used



of buds and shoots), beside *βλωθ-ρός* 'springing high, grown high' (I § 306 p. 242); *ἤμαρ-το-ν* Lesb. inf. *ἀμβρότην* (for \**ἀμβρατην*, I § 292 p. 233), pres. *ἀμαρτάνω* 'I miss, err', probably from *ἀ-μαρ-το- ἀ-μβρα-το-* 'having no share' (from the root of *μέρ-ος μύρ-ο-ς*), cp. *ἀμαρεῖν* \**ἀμαρτάνειν* Hesych. (Curtius, Verb II<sup>2</sup> 10 ff., and the Author, Sprachwiss. Abhandl. 160); on the present stems *βλαστάνω ἀμαρτάνω* see § 621 p. 158. Att. *ἀνύτω* beside *ἀ-νύω ἄ-νυ-μι* 'I complete' (§ 639 p. 177) and partic. *ἀν-ήνυ-το-ς* 'that cannot be completed', and similarly Att. *ἀρίτω* beside *ἀρύω* 'I create'.<sup>1)</sup>

Of the numerous Verbs in *-π-τω* (Curtius mentions 48 of them), as *τύπ-τω* 'I strike' *σκάπ-τω* 'I dig' *πέπ-τω* 'coquo', those whose root originally ended in a velar have the first claim to a place in our group; such stems are *πέπτω* from *✓peq-*, *βλάπτω* beside Skr. *marc-*. However, it is possible to see the suffix *-jo-* (Class XXVI) in every single one; and indeed the denominatives *χαλέπτω* (from *χαλεπό-ς*) and *ἀστράπτω* (from *ἀστραπη*) in all probability come from \**χαλεπ-ιω* and \**ἀστραπ-ιω* (I § 131 p. 119).

Remark. I see no cogent reason for denying that *π<sub>1</sub>* may become *πτ* (cp. Kretschmer, Kuhn's Zeitschr. xxxi 436 f.). All that can be said against deriving *τύπ-τω* (cp. *τύπ-ο-ς*) from \**τυπ-ιω* is that it may just as well contain the present suffix *-to-*. But we cannot derive from forms in *-τω* those whose root ended in *φ*, as *κρύπτω*, which comes from the root of *κρύφα*; nor those whose root ended in *q* or *g*, as *πέπτω* beside older *πέσσω* (*✓peq-*), *νίπτωμαι* beside older *νίλω* (*✓neig-*). Still, such forms as *κρύπτω* can easily be due to the analogy of *τύπτω*, the point of contact between the stems being *κρύψω τύψω* etc. (cp. new forms like *σφάττω* instead of *σφάζω*, following *φράττω*, § 714); and thus again, in view of *πέψω* etc., we have no proof that *πέπτω νίπτωμαι* and all the rest are not simply adformates of *τύπτω*. It is also quite possible (in spite of Kretschmer's arguments, as cited, p. 437) that Hom. *ἐνέπτω* beside *ἐνέσσω* (*ἐνέσσω*?), and beside *ἡνέπαπον ἐνένιπον*, was also an adformate of *τύπτω*, although in this verb there is no *ἐνέψω* (for *ἐνέψω* in Il. 2 137 etc. is not from this stem), and this as far as it goes is in favour of a stem with orig. *-to-*.

§ 683. Italic. Lat. *plec-tō*, *pec-tō*, *me-tō*, see § 680 p. 212. *oitor ūtor* (cp. Osc. *úittiuf* 'usio, usus', Pelig. *oisa*

1) *τίπτω* does not come in this group; see § 552, page 107.

abl. 'usa, consumpta') perhaps akin to Gr. *οἶ-ρο-ς* 'fate, lot' from  $\sqrt{ei}$ - 'go' (Danielsson, Pauli's Alt. Stud. III 198 f.). *flec-tō* perhaps from the root of *falx*. *plec-to-r* 'I am struck, punished', either to be set beside *plāga plangō*, in which case we must assume that it came from \**plactor* when used in compounds, without an accent (cp. *plicō*, I § 65 Rem. 2 p. 53); or akin to Lith. *plėsz-iu* 'I tear, snatch' (cp. Gr. *δέρω* 'I flay' and 'cudgel'), in which case it must be pronounced *plēctor*. *nectō* belongs to  $\sqrt{nedh}$ - 'bind', and in its ending probably imitated *plectō*; see Ber. sächs. Ges. der Wiss., 1890, p. 236 foot-note 2. With *plexu-s* i. e. \**plect+to-*, and *ūsus* i. e. \**oi-t+to-*, we naturally compare *fassu-s* i. e. \**fa-t+to-*, from *fa-teor* Gr. *-φα-το-ς* 'said'. Uncertain: Osc. *krustatar* conj. 'cruentetur' according to Bücheler, akin to Gr. *κρυσ-τ-αίνω*, § 664 p. 197.

§ 684. Keltic. It is doubtful whether *brissim* 'I break' originally belongs to this class, see § 680 p. 212.

Remark. The so-called *t*-preterite, which came out of the 3<sup>rd</sup> sing. mid. in *-to*, does not belong to this class. See § 516, page 82.

§ 685. Germanic. O.H.G. *spal-tu*, *flih-tu*, *fihtu*, *bris-tu*, Goth. *falpa* O.H.G. *faltu* see § 680 pp. 212 f. Goth. *ga-vida* 'I bind up' O.H.G. *witu* 'I bind' doubtless for \**wi-tō*, cp. O.H.G. *wi-d* 'line, cord' *wī-da* 'withe, willow' [Eng. *withy*] Skr. *vī-tā-s* 'enfolded, enveloped' Lith. *vej-ù* 'I twist a string'; as the present got into the company of *giba-gita* and suchlike, there were formed Goth. *ga-vap* O.H.G. *wat*; cp. below, Goth. *vinda*. O.H.G. *līdu* 'I suffer' (O.H.G. *leid* O.Icel. *leidd-r* 'painful, paining, hated') probably orig. (pr. Germ.) \**li-pō* and connected with O.H.G. *lēwes* 'alas' (stem \**lai-wa-*). Goth. *hal-da* 'I protect, guard' O.H.G. *haltu* 'I hold, guard' ground-form \**kI-tō*, cp. Gr. *βου-κόλο-ς* 'cowherd'. Goth. *fra-gilda* 'I repay' O.H.G. *giltu* 'I pay back, give equivalent, offer', pr. Germ. \**zel-pō* (if we follow the indications given by O.Swed. *giälla* as compared with O.Icel. *gjalda*, we must accent the root), akin to Gr. *ᾠ-φελον* *ὀ-φλεῖν*,  $\sqrt{ghel}$ -. Goth. *us-alpan-s* 'obsolete' and O.Icel. *aldenn* 'grown old' point to *al-pa-* as the verbal stem,

cp. O.H.G. *al-t* 'old', beside Goth. *a-la* 'I grow up'. The ending of a few onomatopoeic verbs, as Goth. *kriusta* 'I crunch' (*krust-s* 'a crunching'), O.Icel. *gnest* 'I crack', seems to be of the same sort as that of O.H.G. *bristu* O.Icel. *brest* (O.H.G. *brastōn* 'to crack, crackle'); compare the Mid.H.G. weak verb *krīsten* 'groan with pain or exertion' beside *krīzen* Mid.Dutch *crīten* 'groan, shriek' (*-st-* is not for *-tt-*).

Remark 1. O.H.G. *wisu* 'I shun', which is connected with Lat. *vīdō*, and which Kluge assign to this class (Paul-Braune's Beitr. ix 152), seems more likely to be of the *so*-class. See § 684 p. 197.

Extended by an *i*-suffix: Goth. *faúrh-tja* O.H.G. *furiht(i)u* 'I fear' (pret. *forah-ta*), whence the adj., originally participle, *faúrh-t-s* O.H.G. *foraht* 'afraid, afraid'.

The suffixal ending *-ntō* is common in Germanic: Goth. *standa* O.H.G. *stantu* 'I stand' ✓ *sta-*, Goth. *vinda* O.H.G. *wintu* 'I wind or twist' ✓ *wei-*, O.H.G. *swintu* 'I disappear' beside O.H.G. *swī-nu*. The forms pret. *stōþ* and pres. *gavida* make it probable that the nasal is due to the analogy of Class XVI. For the word *swintu*, but for no others, we have some ground for assuming that a *no*-present (Class XIII) has been extended by *-to-*. See § 634 p. 172, and compare Lith. *siuncziù* § 686, O.C.Sl. *ob-reštā* § 687.

Remark 2. Osthoff's view is that the Idg. had a *simple* suffix *-net-* *-nt-*, which is preserved in the above named Germanic words and in others. This to my mind carries no conviction with it. (See, for Osthoff's arguments, Zeitschr. deutsch. Phil., xxiv 215 ff., and Anzeiger für idg. Spr. und Altertumskunde, i 83.)

§ 686.<sup>1)</sup> Balto-Slavonic. In Lithuanian (and Lettic) are numerous present stems in *-stu* and *-sztu* with intransitive and inchoative meaning. *-stu* arose in roots or stems ending in a

1) The Lithuanian and Lettic verbs in *-tu* are very neatly explained by Johansson (Kuhn's Zeitschr. xxxii 507 ff.) as derived from middle forms of the 3<sup>rd</sup> sing. in *-s-to*; e. g. 3<sup>rd</sup> sing. *rimsta* for *\*rīm-s-to*, cp. Skr. *s-aor. d-ra-s-ta*; perhaps also forms with no *s*, as *viřsta* = *\*uřt+to*, cp. Skr. *á-erī-ran*. When the injunctive *rimsta viřsta* had come to be looked on as parallel to *bēga sūka* (see § 999. 2), the forms *rimstu viřstū* were coined on the analogy of *bēgu sūkū*, and so forth.

dental explosive or *s*, and *-sztu* in roots with final palatal explosive. *virš-tù* 'I fall down', pret. *virt-aũ*. *bl̥š-ta* 'evening draws on', pret. *blind-o*. *girs-tù* 'I get to hear' pret. *gird-aũ*. *ges-tù* 'I am quenched, go out', pret. *ges-aũ*.<sup>1)</sup> *t̥š-tù* 'I stretch, lengthen myself', pret. *t̥š-aũ* (cp. *t̥š-s-iũ* § 657 p. 191, § 665 p. 197). *lúsz-tu* 'I break' intr., pret. *lúž-au*. *-sztu* may also come from *-stu* by the influence of preceding *r*, as in *mirsztu* 'I forget' pret. *mirsz-aũ*, beside Skr. *marṣ-* (I § 587.1 p. 442).

Verbs in *-stu* were the starting point for many new formations, as *kił-stu* 'I raise myself', pret. *kił-aũ*; *styr-stù* 'I stiffen', pret. *styr-aũ*; *pa-žĩ-stu* 'I know', pret. *pa-žinaũ*; *rúk-stu* 'I grow sour, ferment', pret. *rúg-au*; *džiũ-stu* 'I grow dry, wither', pret. *džiũv-au* inf. *džiũ-ti*. New forms in *-sztu*; *m̥r-sztu* 'I die', pret. *mir-iaũ*, cp. Gr. *ἐ-μορ-τε-ν* § 682 p. 213.

Often the stems which serve as groundwork for these words already have present formative suffixes; e. g. *tvĩ-stu* 'I swell out' (pret. *tvín-aũ*) derived from *\*tv-inu*, see § 624 p. 161; *jũnk-stu* 'I grow accustomed' (pret. *jũnkau*) from *\*junku* akin to Skr. *uc-ya-ti*, *v̥š-tù* 'I increase, grow larger' from *\*vinsu* cp. pret. *vis-aũ*, see § 635 p. 173; *aũsz-ta* 'day dawns' from a *sko*-present *\*ausza* connected with Skr. *uchá-ti*, see § 677 p. 210.

Denominatives too were formed in this class. *gelstù* 'I grow yellow' pret. *geltaũ* from *gel̥ta-s* 'yellow', *karstù* 'I grow bitter' pret. *kartaũ* from *kartù-s* 'bitter', *brankstù* 'I grow dear' pret. *brangaũ* from *brangù-s* 'dear', *žũstu* 'I fish' pret. *žuvaũ* from *žuv-ĩ-s* 'a fish'. Compare § 793.

Remark 1. Bezenberger (Beitr. ix 336) and Wiedemann (Lit. Prät., 60) deny that the Lithuanian *to*-present series is connected with those of the other Idg. languages. It certainly is queer that only one Lith. *to*-present has cognates in other languages, namely *mirsztu* 'I die', which comes from the same root as Gr. *ἐ-μορτε-ν*; and this comparison is a very precarious foundation for any theory.

1) Parallel stem, dial. *gistu*. The *i* in this and similar forms (see Wiedemann, Lit. Prät., 8) I regard as a re-formation on the analogy of Lith. roots such as *gris-* *glib-* (beside *gres-* *gleb-*) with *ri li* = *r̥ l̥*. Similarly O.C.Sl. *tici* etc. following *r̥ici*, § 534 p. 96.

*siuncziū* 'I send' (inf. *siūsti*) doubtless instead of \**siuntu* like *jūng-iu* instead of \**jung-u* etc.; and if this word be connected with Skr. *sāv-a-ti suv-d-ti* 'sets in motion, drives, sends' (Wiedemann, Lit. Prät., 84) we should have in \**su-n-tō* a present like Goth. *vi-n-da* § 685 p. 216.

Remark 2. The 3<sup>rd</sup> sing. *ē-t(i)* 'goes' *lēt(i)* 'remains' *mēt(i)* 'sleeps' *sēs-t(i)* 'sits' (§ 511, pp. 76 f.), gave rise to the dialectic forms Lith. *eitū eitū eitam eitat, lēktū mēktū sēstu*, and so forth, and similarly, in Lettic, 1<sup>st</sup> pl. *ītam* follows *ī-t* 'goes' (Bezzenberger in his Beitr. ix 384 ff.). This re-formation, which has an exact parallel in Keltic (§ 506 p. 72), was in some degree due to the *to*-present stems: *-t(i)* and *-t(a)* were regarded as the same in structure.

§ 687. O.C.Sl. *čx-tq, m-e-tq, pl-e-tq*, see § 680 p. 212. *rastq* 'I grow' inf. *rasti* (*rastū* 'growth', *rastī* 'usury, interest') for \**rād + tq*, cp. *rodū* 'birth'. Mention should also be made of *ob-rētū* 'I found', if this is to be connected with *rējā* 'I knock'; to this the present *-rēštq* (§ 636 p. 174) would have just the same kind of relation as Goth. *sta-n-da* to *stōþ* (§ 685 p. 216).

## H. CLASS XXV.

Root + *-dho-* and *-do-* forming the Present Stem.

§ 688. Although under certain circumstances *dh* could become *d* in the parent language (I § 469. 8 p. ), that is not the reason why I class *-dho-* and *-do-* together now. It is not that I regard them as being always variants of the same suffix; but simply because in some languages *dh* and *d* ran together and became indistinguishable, which makes it often quite impossible to say which of the two is used with a given form.

The *dh*-suffix which we see in forms like Gr. *βῆθ-θω πῆθω* *πλῆθ-θω φλεγέ-θω* has often been derived from  $\sqrt{dhē}$  'place, do' (Skr. *dādha-ti* etc.), this being deduced from other compounds of this root, both old and new, about which there can be no doubt, as \**syē-dhē* \**syē-dhē* \**syō-dhē* 'make one's own' in Skr. *sya-dhā* 'custom, wont' Gr. *ἔθ-ων* 'consuetus' *ἔθ-ος* *ἥθ-*

-oṣ *īwo-ṣ-a*, Skr. *śrād-dadhāmi* 'I believe, trust' Lat. *crēdō* O.Ir. *cretim* (II § 4 p. 9, § 160.1 p. 479), Avest. *yaož-dāiti* *yaož-dađāiti* 'makes something right, purifies' from *yaoš* = Skr. *yōṣ* 'weal, luck, happiness'. This may indeed be the real origin of all such stems. The consonant which began the second part of the compound stem became practically the 'root-ending' in *βοῖδω βέβροῖθα*, very much in the same way as the *p* in *gōp-a-ti* *ju-gōp-a* *gōp-sya-ti* etc. from *gō-pā-* *gō-p-ā-*.

Just so the suffix *-d-* may sometimes be the  $\sqrt{dō-}$ , which in addition to its meaning 'give' had other meanings like those of *dhē-* (Osthoff, *Perf.* p. 237), cp. I § 404 pp. 298 f., on Skr. *mṛdā-ti* pr. Ar. *\*mṛž-da-ti*.

The thematic stems in *-o-* (*-dho-*, *-do-*) were originally not the only ones which contained these additional suffixes. But although not the only stems, thematic stems were commonest of all in this connexion, and without doubt this was generally true in the original language. We shall have occasion to point this out when we find other stems parallel to those in *-o-*.

§ 689. Pr. Idg. *-dho-*<sup>1)</sup>  $\sqrt{yel-}$  'to wish, rule' (Lat. *vel-le* O.Ir. *flaith* 'lordship'): Goth. *val-da* 'I have power, rule', O.C.Sl. *ola-da* 'I have power, rule' (for *\*vol-da*), both for  $\sqrt{dh-}$ , cp. Lith. *val-d-au*; parallel stem Lith. *vel-du* 'I rule' *pa-vėldu* 'I inherit' (Pruss. *weldūnai* pl. 'heritages'). From *\*sger-dh-*, beside Lith. *skīr-ti* 'to sever, part': O.H.G. *scrintu* 'I burst, am shattered' by transfer to Class XVI (§ 634 p. 171), Lith. *skėrdžiu* 'I burst, or blow up', which is derived from a form *\*sker-du* (§ 765). From the root of Skr. *yu-* 'to mix, stir, disturb': Skr. *yō-dha-ti* 'gets in motion' (*yúdh-ya-tē*,

1) Per Persson, in his *Wurzelerw.*, pages 35 ff., sees the determinative *dh* and *d* in many instances besides those for which they are here assumed. Some of these are words in which *dh* or *d* is taken in this book to be part of the root proper; e. g. Skr. *gfdh-ya-ti*, which he derives from the root of O.H.G. *ger* 'desiring', and Gr. *μῆδω* Goth. *mita*, which he derives from  $\sqrt{mē-}$  'measure'. For a new discussion of forms with determinative *d* see Johansson, *Idg. Forsch.* II 42 ff., and 46 ff.

2<sup>nd</sup> sing. *yōt-si*), Lith. *ju-dù* 'I move trembling', *jundù* 'I get into a trembling movement, into uproar' (pret. *judaũ* inf. *jùsti*) by transfer to Class XVI (§ 635 p. 172), compare Gr. *ῥομῖν-η* 'battle' i. e. *\*v̥θ+σμιῖν-* (II § 115 p. 359), Lat. *juba jubeō* (Bugge, Bezz. Beitr. xiv 58 f.).<sup>1)</sup> From *rē-* (Lat. *reor rē-ri*): Skr. *ā-rā-dha-t* 'brought to a happy conclusion, set right' (*rādh-ya-tē rādh-nō-ti*), Goth. *ga-rēda* 'I consider, I bestir myself' *ur-rēda* 'I give judgement, decide' O.H.G. *rātu* 'I advise, think of, conjecture, prepare carefully', cp. O.C.Sl. *raditi* 'to consider, care for'. From the same root as Lith. *kló-ju* 'I spread abroad': A.S. *hla-de* 'I load, cover with portable things' (ground-form *\*qlō-dhō*), O.C.Sl. *kla-da* 'I invite, lay down' (cp. Kluge, Etym. Wört. s. v. *laden*).

Two other forms, which others with less reason regard as reduplicated, will also come in here: Skr. partic. *dōdhat-* 'shaking, violent, storming' (*dūdhi-i-ṣ* 'violent') and Gr. *θρίσσομαι* (for *\*θνθ-λο-μαι*) 'I shake or stir myself', both connected with Skr. *dhū-* 'to shake'.

§ 690. Pr. Idg. *-dō-*.  $\sqrt{(s)ger-}$  (Gr. *σκαίρω* 'I leap, jump, dance'): Skr. *kūr-da-ti* 'jumps, leaps', cp. Gr. *κραδ-άω* 'I swing, brandish' *κόρδ-ᾱξ* a kind of dance, Mid.H.G. *scherze schirze* (weak verb) 'I jump in a lively way'.  $\sqrt{mel-}$  (Lat. *molō*, Skr. *mlā-ti* 'grows soft, slackens' O.Ir. *mlāith* 'soft, slack', see § 580 p. 122): Skr. *vi-mrada-ti* 'softens', A.S. *mel-te* 'I melt, grow soft' (Goth. *ga-maltein-s* 'loosening, solution'), cp. Skr. *mṛdú-ṣ* 'soft' compar. *mrádīyas-*, Gr. *ἀμαλδένω* 'I soften, weaken' *βλαδ-αρό-ς* 'slack, loose, loosened', Lat. *molli-s* for *\*mold-ṷ-i-s*; Skr. *mrad-* = *\*ml-e-d-* with the same intermediate vowel *e* which is seen in Gr. *ῥ-σγ-ε-θο-ν* § 694 Lat. *m-e-tō* § 680 p. 212; from the same root we have a stem *\*mel-dh-* Skr. *mārdha-ti* 'slackens, gets lazy or sluggish' Gr. *μαλθακό-ς* 'soft, tender' (beside *μαλακό-ς*) *μάλθαω* (gen. *-ων-ος*) 'weakling'

1) Another, but hardly better explanation of *jubeō* may be seen in Bezenberger's Beitrage, xvi 216 (Froehde).

O.Sax. *mildi* 'mild, gracious, gentle', so that it is impossible to decide whether *-dh-* or *-d-* is contained in O.Ir. *meldach* 'acceptus, gratus', Lith. *meldžiū* 'I beg', O.C.Sl. *mladū* 'tender'. Connected with Lat. *sāl sal-is*: Lat. *sallō* for *\*sal-dō* (I § 369 p. 280), Goth. *sal-ta* 'I salt'.  $\sqrt{ghey-}$  'pour' (Gr.  $\chi\acute{\epsilon}\omega \chi\acute{\upsilon}-\tau\phi\acute{\alpha}$ ): Lat. *fundō* (perf. *fūdī*) conjugated in Class XVI (§ 632 p. 169),<sup>1)</sup> Goth. *giuta* O.H.G. *giuzu* 'I pour'.  $\sqrt{pley-}$  'float, swim' (Gr.  $\pi\lambda\acute{\epsilon}(f)\omega$ ): O.H.G. *fluizu* O.Icel. *flyt* 'I flow', Lith. *plaudžiū* 'I wash, purify' (inf. *plaušti*), *pludžiū* 'I chatter' (inf. *plūsti*), *plūstu* 'I begin to swim, get swimming' (pret. *plūdau*), cp. O.Ir. *do-lod-sa* 'ivi' 3<sup>rd</sup> sing. *do-luid* § 697.  $\sqrt{sprey-}$  (Lett. *sprau-jū-s* 'I rise, spring up', of seed): Mid.H.G. *spruize* A.S. *sprūte* 'I sprout' (A.S. *spreót* 'stalk, shaft' O.H.G. *spruza* 'prop, pillar' O.H.G. *sprozzo* 'sprout'), Lith. *spráudžiū* 'I push forcibly into a narrow space, press' (inf. *spráusti*) *sprūstu* 'I push my way out of a holdfast or fix, get out' (pret. *sprūdau*). With Lat. *clāv-i-s*: *clau-dō*, compare O.Fris. *skūte* (for *\*sklūt-*) 'I close' (O.H.G. *sliuzu* is doubtless *\*slūzu* transformed by analogy).

Following the same lines of reasoning, I derive Skr. *svāda-tē* Gr.  $\eta\delta\epsilon-\tau\alpha\iota$  from *\*syā-de-tai* 'enjoys with gusto', and Skr. *svāda-ti* Gr.  $\acute{\epsilon}\delta\alpha\nu\acute{o}-\varsigma$  'suavis' from *\*sy-e-de-ti* (cp. Skr. *mr-a-da-ti* above); these forms are obviously akin, and I can see no other way of bringing them together.

§ 691. Aryan. (1.) *-dho-*. Skr. *yō-dha-ti*, *á-rā-dha-t*, *dō-dhat-*, see § 689. Skr. *á-kru-dha-t* 'got angry' (*krúdh-ya-ti*), Avest. *xrao-da-itī* 'is anxious',  $\sqrt{grey-}$  Skr. *krū-rá-s* 'coarse, rough, terrible, gruesome'. Avest. *a-rao-đa-p* 'flowed' (*raođayē-itī*) from *srey-* Skr. *srāv-a-ti* (*r-* = *\*sr-*, cp. O.Pers. *rauta-* I § 558.3 p. 414), cp. Skr. *vi-srúh-* 'stream, body of water' (*-h-* = *-dh-*, I § 480 p. 354), Gr.  $\rho\nu\theta-\mu\acute{o}-\varsigma$ . Skr. *srē-dha-ti* 'he goes wrong', beside *a-srēmán-* 'without error, faultless'. Skr. *sādha-ti* 'gets to the goal, puts in order' may be derived from  $\sqrt{sē-}$  (Skr. *sā-* 'to bring to an end, conclude' *vy-ava-sāmi*

1) For *f* in *fundō*, see Buck, Am. Journ. Phil. XI 215 f.



*a-sā-t*, Lat. *sē-ru-s*, O.Ir. *sī-r* 'lasting long or for ever' Umbr. *sevom* Osc. *sivom* 'omnino' = *\*sē-yo-m*).

§ 692. (2.) *-do-*. Skr. *kūr-da-ti*, *mr-a-da-ti*, *svā-da-ti* *sv-ā-da-ti*, see § 690 p. 220. Skr. *tar-da-ti* (gramm.) 'pierces, splits, opens' (*trṇāt-ti*), akin to *tār-a-ti* 'traverses', cp. Lith. *trėndu* 'I am eaten of worms or moths' § 637 p. 174 and *trėdė* 'diarrhoea' *pra-trýstu* 'I fall ill of diarrhoea' (pret. *-trýdau*).<sup>1)</sup> Skr. *khā-da-ti* 'bites to pieces, chews' beside *khān-a-ti* 'digs, grubs'. Skr. *mṛḍā-ti* 'is gracious, pardons' for *\*mṛḥ-ḍa-*,<sup>2)</sup> cp. Avest. *mer'ēdika-* n. 'grace, pardon', either from the root of *merḡ-* 'wipe off' Skr. *mṛjā-ti* 'wipes off, purifies of guilt', or from that of Skr. *mṛṣ-ya-tē* 'forgets' Lith. *mirsz-ti* 'to forget' (cp. Lith. *už-mirsz-dinu -mirėdinu* 'I cause to forget'). Skr. *īḍa-tē* 'honours, praises, prays to' (*īḍ-tē*) for *\*iḥ-ḍa-tai*, either connected with *yāj-a-ti* 'honours, reverences, offers' partic. *iṣ-ṭā-s* Gr. *ἄγ-ιος* 'honourable, sacred', or with Lat. *aes-tumāre* Goth. *āis-tan* weak verb 'to revere, observe, have regard for' O.H.G. *ēr-a* 'honour'; it should be remarked that the Gothic verb may be derived from Idg. *\*aiḥ-d-* or from Idg. *\*aiḥ-s-*, either one or the other. Avest. *xraoḥ-da-iti* 'hardens' (*xruēd-ra-* 'hard') beside Gr. *κρυο-ταίνω* 'I make to freeze', in which *s* is itself an extension (§ 664 p. 197); perhaps from the same root, Skr. *krūḍaya-ti* 'makes thick' *krōḍā-s* 'breast, boar'. Lastly, we are doubtless right to add Skr. *hṛḍa-māna-s* *hīḍa-māna-s* 'being angry with some one, hostile' Avest. *zōišda-* 'ugly, disagreeable, αἰσχρός'.<sup>3)</sup>

§ 693. 3. *-dho-* or *-do-*, uncertain which. To this place belong Avestic verbs. *syaz-da-iti* 'gives place, disappears', cp.

1) *y* in *-trýstu* is not original. By analogy of *i*-roots were formed *trėdėšiu* 'I have diarrhoea' *trėdėimė* 'I excite diarrhoea'.

2) More exactly *mṛḥḍā-ti*, answering to *liḥḍā-* for *\*liḥḍā-* (I § 404 pp. 298 f.). The long *ṛ* is certain from the metre; see Benfey, *Vedica und Verwandtes*, pp. 1 ff., Oldenberg, *Die Hymnen des Rig-Veda*, I 477.

3) The unextended root is not really contained in Lith. *pa-įeida* 'insult, wound' (cp. Zubaty, *Bezs. Beitr.* xvii 327); this is against the known laws, see I § 476 p. 351 f., and Burg in Kuhn's *Zeitschr.* xxix 363.

*siḍdye-iti siḍdye-iti* 'drives away', seems to be akin to Skr. *śiṣ-* 'to be over, left behind' (*śinās-ti śiṣ-aya-ti*). *vōiḥ-da-iti* 'hurls, throws against something', perhaps connected with O.C.Sl. *vich-rŭ* 'whirlwind' Russ. *vichati* 'shatter, agitate'.<sup>1)</sup> *avanauhab-da-itē* 'falls asleep', from Ar. *suap-* 'to sleep' (I § 159 pp. 141 f.). *snā-da-iti* 'washes', beside Skr. *snā-ti*.

§ 694. Greek. (1.) *-dho-*. *ἐ-δρα-θo-ν* *ἐ-δρα-θo-ν* 'I slept' (pres. *δρα-θ-άνω* § 621 p. 158), beside Lat. *dor-miō* Skr. *dr-a-ti*. Hom. opt. *βε-βρά-θoι-ς* 'comedas' (Od. 4. 35) from *βι-βρώ-σχω* ✓ *ger-*: cp. Lith. *gīr-d-inu gēr-d-inu* 'I give to drink' (*ger-iū* 'I drink'). *ἤλυ-θo-ν* 'I came', beside *προσ-ήλυ-το-ς* perf. 2<sup>nd</sup> pl. *ἐλήλυ-τε*. *ἐρέχ-θω* 'I pull to and fro, tear, hurl', doubtless akin to O.H.G. *ruc* 'jerk, jolt, sudden change of place'. *ἔσθω* 'esse' (*ἔσθ-ίω* §§ 713, 765) beside *ἔθ-ω*. *ἄχ-θo-μαι* 'I am galled or wearied by burdens', beside *ἄχ-νυ-μαι*. *πλή-θω* 'I am full', beside *πίμ-πλη-μι*. *κνή-θω* 'I shave, rub, scratch', beside *κνή* (§ 737). *πύ-θω* 'I make rot' (perf. *πέπυθα*), beside *πύo-ν* 'pus': Lith. *pū-d-inu pū-d-au* 'I make rot' Lett. *pa-pū-d-e* 'fallow field' beside *pāo-ū* 'I make rotten'. *βρέ-θω* 'I weigh, press hard upon' (perf. *βέβριθα*), beside *βριαρός* *βαρ-ύ-ς*.

*ἔσχ-ε-θo-ν* 'I held', beside *ἔσχ-ε-ς* ✓ *segh-*. *κατα-βλ-έ-θαι* *καταπίνει* Hesych., beside O.Ir. *gelid* 'consumit' O.H.G. *chela* 'throat'. *φλεγ-έ-θω* 'I burn', beside *φλέγ-ω*. *νεμ-έ-θo-μαι* 'I pasture', beside *νέμ-o-μαι*. *τελ-έ-θω* 'I am', beside *τέλλω*.

*-α-θω* = *\*-ə-dhō*. *πελ-ά-θω* 'I draw near', beside *πέλα-ς* *πελά-σσαι*. *διωκ-ά-θω* 'I pursue', beside *διώκ-ω*. *ἀμύνά-θω* 'I ward off', beside *ἀμύνω*. *μετα-κί-ά-θω* 'I go after, pursue', beside *κίω* 'I go'. Here perhaps should come *γῆθoμαι* Dor. *γάθoμαι* (perf. *γέγηθα* *γέγαθα*) and *γηθέω* 'I enjoy, am pleased', for *\*γᾱf-α-θ-*, beside *γαίω* 'I take pleasure' for *\*γαf-μω* and *γαῦ-ρο-ς* 'proud': Lat. *gaudeō* for *\*gāvideō* (I § 612 p. 462), — observe that *gāvīsus* seems to imitate *vīsu-s*, which would show

1) Still more uncertain is Bartholomae's comparison of the word with Skr. *vīdu-* in *vīdu-pāṭman-* (Bezz. Beitr. xiii 87).

it to have been formed at some time when there was a present *\*gāvideō* still in use; as regards the ending *-εω -εō*, see § 801.

*μινύ-θω* 'minuo' beside Skr. *mī-nō-mī*, *φθινύ-θω* 'I destroy' beside *φθίνω φθίνω* for *\*φθινύ-θω* Skr. *kṣi-nō-mi*, see § 639 p. 177, § 652 p. 186.

*βαρύ-θω* 'I am weighted' beside *βαρύνω βαρύ-ς*, cp. end of § 611.

§ 695. (2.) *-δο-*. *ἐλ-δο-μαι* Hom. *ἐέλδομαι* 'I wish, desire' for *\*ελ-δο-*, beside Lat. *vel-le*; cp. Goth. *val-da* O.C.Sl. *vla-da* Lith. *vel-du* with *-dho-* § 689 p. 219. *ἔφλα-δον* 'I popped, burst', beside Skr. *phal-a-ti* 'bursts' or beside *φλ-αίνω* § 621 p. 158. *ἔφλι-δε-ν* *διέρρεεν* Hesych. (*φλιδ-άνει* Hesych., *φλιδή* 'superfluity, abundance') beside *Φλίās* (Curtius, Gr. Etym.<sup>5</sup> 301). *τένδω* 'I gnaw', doubtless for *\*τεμ-δω* and connected with *τίμ-νω*; cp. Lat. *tondeō*.

*-δ-* is very common in other formations, both in verbs and nouns. We may mention further *κρα-δ-άω κόρ-δ-ᾶξ* and *άμαλ-δ-ένω βλα-δ-αρό-ς* § 690 p. 220. Other examples: *κλα-δ-άσαι* 'σεῖσαι' Hesych., beside *άπο-κλάς κλη-ρος* 'lot' (a chip or piece of wood, or other substance, broken off): Lat. *per-cellō* for *\*cel-d-ō* § 696. *ἐ-ρού-δ-αται, ῥάσσετε* for *\*ράδ+σα-τε*, beside *ῥαίνω* 'I sprinkle' § 621 p. 159. *κε-χλιδ-ύτ-α* *άνθοντα* Hesych., *χλιδή* 'softness, luxuriance, wantonness', *δια-κεχλοιδώς* *διαρρέων* *ύπό τρυφής*, from *χλίω* 'I am soft, effeminate'. *μει-δ-άω* 'I smile' *φιλο-μμειδής*, akin to Skr. *smāy-a-tē*: cp. Lett. *smai-da* 'a smile' *smī-dinā-t smī-dinā-t* 'to make laugh'. *κλύ-ζω* 'I flood' for *\*κλυ-δ-ιω*, *κλύ-δ-ων* 'wave': Goth. *hlū-t-r-s* 'pure, clean', connected with O.Lat. *cluere* 'purgare' and *cloāca*. *ἐκ-φλύ-ζω* 'I break out' (of a sore or abscess) for *\*φλυ-δ-ιω*, beside *ἐκ-φλύω*.

§ 696. Italic. (1.) *-dh-* in Lat. *ju-b-eō*, see § 689 p. 220, and probably *gaudeō* for *\*gāvideō*, see § 694 p. 223.

(2.) *-d-* in *sallō* for *\*sal-dō*, *fundō fūdī*, *clau-dō*, see § 690 p. 221. *per-cellō* for *\*cel-dō* from the same root as *clad-ēs* (I § 306 p. 243), and connected with Gr. *κλα-δ- κλά-*, see § 695.

*cū-dō*, once also *\*cau-dō* (Conway, Verner's Law in Italy, p. 72), connected with Lith. *káu-ju* 'I strike, forge, fight' O.C.Sl. *kop-a* 'I forge'.

(3.) *-dho-* or *-do-* (doubtful). *frendō* beside *fremō* (cf. Osthoff, M. U. v 94 f.), perhaps for *\*fremidō*. *caedō*, according to Holthausen, P.-B. Beitr. xi 554 f., connected with Mid.Dutch *heie* 'hammering block' *heien* 'to strike, ram, stamp' Mid.H.G. *heie* f. 'mallet, wooden hammer'. Other possible forms are *tendō* from *✓ten-*, see § 564 p. 111, and *dē-fendō* *of-fendō*, which may be connected with Gr. *θεῖω*, and come from *✓ghen-* (is *fēnu-m* 'hay' for *\*fen-sno-* or *\*fend+sno-*, meaning 'something cut'?)<sup>1</sup>

§ 697. Keltic. *-d-* is perhaps the suffix of *do-lod-sa* 'ivi' beside *luath luad* 'quick, fleeting', beside O.H.G. *flūz-u* § 690 p. 221 (so Zimmer, Kuhn's Zeitschr. xxx 215 f.).

§ 698. Germanic. (1.) *-dho-*. Goth. *val-da* O.H.G. *waltu* 'I rule, hold sway', O.H.G. *scrintu* 'I burst, blow up', Goth. *ga-rēda* 'I reflect upon, meditate' O.H.G. *rā-tu* 'I advise', A.S. *hla-de* 'I load', see § 689 p. 220. O.Icel. *bregð* 'I set moving quickly, I swing' A.S. *bregde* 'I swing, throb' O.H.G. *brittu* 'I swing, throb' (for *-tt-* see Braune, Ahd. Gr.<sup>2</sup> § 164 Anm. 2 p. 135) doubtless for *\*bhregð-* *-dhō*, beside O.C.Sl. *brīz-ŭ* 'quick' *brīz-ati* 'to run quickly'; in Kluge's view of the treatment of pr. Idg. med. asp. + tenuis (Paul-Braune's Beitr. ix 152 f., Paul's Grundr. i 327), another possible ground-form would be *\*bhreggh+to* (Class XXIV).

§ 699. (2.) *-do-*. Mid.H.G. *scherze* 'I jump quickly about', A.S. *mel-te* 'I grow soft', Goth. *sal-ta* O.H.G. *salzu* 'I salt', Goth. *giu-ta* O.H.G. *giuzu* 'I pour', O.H.G. *flū-zu* 'I flow', Mid.H.G. *spriu-ze* A.S. *sprū-te* 'I sprout', O.Fris. *slū-te* O.H.G.

1) If *-fendō* should be connected with Skr. *bādha-tē* 'compels, oppresses', the latter must be kept distinct from Skr. *vadh-* Avest. *vaδ-* (Gr. *ωδew*). *-fendō*, which may have once been *\*fandō*, would then belong to Class XVI § 632. Yet another explanation is given by Fick, Wtb. i<sup>4</sup> 463, who compares O.Icel. *detta* 'to fall down'. Conway, Class. Review v 297, explains *tendo* *-fendō* as being for *\*ten-iō* *\*ghen-iō* = Gr. *τελω* *δελω*.

*služu* 'I shut', see § 690 pp. 220 f. O.Sax. *writu* O.H.G. *rīzu* 'I tear, wound, write', cp. Gr. *ῥι-νῃ* 'file, rasp' *ῥι-νό-ς* 'hide still on the body' (but *δέγω* from *δέγω*). O.Icel. *vel-t* 'I roll' trans. O.H.G. *walzu* 'I roll, turn myself', the latter for \**ul-dō*, beside Lith. *vel-ti* 'to full, mill' Lett. *wel-t* 'to roll, full, mill', compare Lith. *vel-d-inu* 'I have something full or milled'. Goth. *swil-ta* 'I die slowly away', O.H.G. *swilzu* 'I am devoured by fire, I spend myself in coitu, pine away', O.Icel. *svelt* 'I hunger', beside A.S. *swelan* 'to smoulder, burn slowly and glow': cp. Lith. *svil-d-inu* 'I get something singed'. O.H.G. *sciu-zu* O.Icel. *skgt* 'I shoot': Lith. *szau-d-ỹ-klė* 'shuttle' *szdu-d-au* 'I shoot or move again and again' *száu-d-inu* (causal of the last) Lett. *schau-d-e-klis* 'spooler bobbin' *schau-d-r-s* 'hasty, hot', beside Lith. *száu-ju* 'I shoot'. O.H.G. *glī-zu* O.Sax. *glitu* 'I gleam, shine', akin to O.Sax. *glī-mo* 'a gleam or sheen, a brightness'. O.H.G. *wā-zu* 'I blow' ground-form \**uē-dō*, connected with O.H.G. *wā-u* 'I blow' Skr. *vā-ti*: cp. Lith. *vė-d-inu* 'I expose to the air, I air'. According Fick Wtb. 1<sup>4</sup> 539 f., O.H.G. *lāzu* Goth. *lēta* 'I let', with which we have connected Gr. *ληθεῖν* (§ 521 p. 85), would come from *lē-*.

§ 700. Balto-Slavonic. When Balto-Slavonic *-do-* comes from Idg. *-dh-o-*, and when from Idg. *-do-*, can only be made out by help of the cognate languages.

(1.) *-dho-*. Lith. *vel-du* 'I rule' O.C.Sl. *vla-dq* 'I rule, hold sway', Lith. *skėrdžiu* 'I burst' instead of earlier \**sker-du*, Lith. *ju-dū* 'I move trembling' *jundū* 'I begin to move all a-tremble', O.C.Sl. *ra-d-iti* 'to meditate or reflect upon', see § 689 p. 219. Lith. *gīr-d-inu* *gēr-d-inu* *gīr-d-au* 'I give to drink', *pū-d-inu* *pū-d-au* 'I cause to rot' Lett. *pa-pūde* 'fallow land', see § 694 p. 223. With Lith. *ĩ-stó-d-in-ti* 'to give admittance to' Lett. *stá-d-i-t* 'to set, place, plant' *stá-d-s* 'a plant' we may compare Gr. *στα-θ-ερό-ς* 'standing firmly' *στα-θ-μός-ς* 'standing place'. O.C.Sl. *i-dq* 'I go' (inf. *i-ti*) may be closely connected with Gr. *ἵ-θ-μα* 'course, way, step'.

(2.) *-do-*. Lith. *plau-d-žiu* 'I wash, purify' *plu-d-žiu* 'I chatter' *plūstu* 'I begin to swim' *pláu-d-in-ti* 'I cause to be

rinsed' Lett. *plū-d-inā-t* 'I make overflow', Lith. *sprāu-d-žiu* 'I compel' *sprūstu* 'I rush out of a narrow place', see § 690 p. 221. Lett. *smāi-da* 'a smile' *smī-d-inā-t* 'to make laugh', see § 695 p. 224. Lith. *vél-d-inu* 'I cause to be milled or fulled', *svl-dinu* 'I cause to be singed', *szau-d-ỹ-klē* 'shuttle' Lett. *schau-d-r-s* 'hot, hasty', Lith. *vė-d-inù* 'I air', see § 699 p. 226.

Some of these distinctions between orig. *-dh-* and *-d-*, made by help of other languages, are naturally very little to be trusted. As *-d-ina-* was a very fertile suffix in both Lettic and Lithuanian, there need be no very real connexion between such endings as those of *svl-dinu* and Goth. *svil-ta*.

§ 701. (3.) In many instances it is quite impossible to distinguish between orig. *-dho-* and *-do-*.

On the doubtful points in the explanation of Lith. *mel-d-žiu* 'I beg' O.C.Sl. *mā-dū* 'tender', see § 690, p. 220.

Lith. *vér-du* 'I boil' pret. *vir-iaũ* inf. *vir-ti*. *mér-d-žiu* and *mér-d-mi* 'I lie a-dying' (inf. *mér-d-ė-ti*), from *miř-ti* 'to die' (Lat. *morbu-s* for *\*mor-dho-s*?). Lett. *e'r/chu* 'I separate' for *\*er-d-ju* (pret. *e'rdū* inf. *e'rst*), beside Lith. *yr-ù* 'I separate, myself, set myself free'. Lith. *skél-du* and *skél-d-žiu* 'I split, burst' intrans. (inf. *skél-d-ė-ti*), *skél-d-in-ti* 'to make or cause to be split', from *skelù*, i. e. *\*skel-ju* 'I split' (inf. *skél-ti*).<sup>1)</sup> Lith. *grimstù* 'I sink' pret. *grimzdaũ* inf. *grimsti*, beside Lett. *grī'mstu grīmu grī'mt*, points to a pres. *\*grem-du* or *\*grim-du*; and Lett. *gi'nstu* 'I perish' pret. *gi'ndu* inf. *gi'n-t* to a present *\*gin-du*. Lith. *sru-d-žiu* 'I make bloody' (inf. *srusti*) beside *pa-srūv-o* 3<sup>rd</sup> sing. 'flowed'. Lith. *gė-du* 'I sing' and *gė-d-mi* (3<sup>rd</sup> sing. *gėsti*), cp. *gaĩda-s* 'singer' *gaidỹ-s* 'cock', akin to Skr. *gāya-ti* 'sings' *gē-ṣṇú-ṣ* *gē-ṣṇa-s* 'singer' (cp. Per Persson, *op. cit.*, 117, 197).

From the series containing *-dho-* and *-do-* were formed a large class of Lith.-Lett. Causals and Frequentatives, ending in (Lith.) *-d-inu* inf. *-d-inti*, and in (Lith.) *-d-au* inf. *-d-y-ti*. Many

1) Per Persson (Wurzelerweiterung, 38) connects *skėldėti* with Gr. *κλαδίζω*, Lat. *per-cellō* (§ 695 p. 224). If so, its *d* would come from Idg. *d*.

of these howe been cited already. With *-d-inu* compare Gr. *δαρ-θ-άνω* beside *ἔ-δαρ-θ-ο-ν* (§ 694 p. 223), *φλι-δ-άνει* beside *ἔ-φλι-δε-ν* (§ 695 p. 224). The verbs in *-d-au -d-y-ti*, with frequentative meaning, often show a root syllable of the second strong grade (see § 790), as *skál-dyti* 'to split again and again' from *skél-du* 'I split myself' *skél-dinu* 'I cause to be split'.

To the same dental group belongs the partic. II. pres. act. in *-dama-s*; here the *m*-suffix is the same as in *věša-ma-s* fut. *věszi-ma-s* etc. (II § 72 p. 166), and had the original middle meaning. Therefore the form *skél-dama-s*, for example, which is now attached to the verb *skelù*, originally belonged to *skél-du skél-d-ěiu* just as *skél-dinu* did.

O.C.Sl. *ja-da* 'I ride, vehor' <sup>1)</sup> beside inf. *ja-ch-a-ti* (§ 665 p. 198).<sup>2)</sup> *bada* 'fio' may be derived from  $\sqrt{bhey-}$ , by assuming *\*bhy-a-dhō* *\*bhy-a-dō* (cp. Lat. *-bam* for *\*bhy-a-m*) or *\*bhū-dhō* *\*bhū-dō*, which got a nasal in Class XVI (§ 637 Rem., p. 176); or even if we suppose that a present *\*bona* for *\*bhy-onō* (Class XIV, § 624 p. 162) was extended by *-dhō* or *-dō* (cp. Lith. *kaĩtin-drinu* 'to cause to be heated' derived from *kaĩt-inu* 'I heat').

## I. CLASSES XXVI TO XXXI.

### PRESENT STEMS WITH *-jo-*.

§ 702. This suffix appears in the forms *-jo-* *-je-* or *-ijo-* *-ije-*. Examples of *-jo-* are Skr. *hár-ya-ti*, Gr. *χαίρω* for *\*χαρ-ρω*, Goth. *vaurk-ja*, Lith. *spir-iù sė-ju* O.C.Sl. *sě-ja*. Of *-ijo-*: Skr. *mr-iyá-tē* Gr. *ἔσθ-ίω*, Lat. *suf-fio* (for *\*dhy-ijō*) *farc-iō*, O.Ir. *b-iu* (for *\*bhy-ijō*), A.S. *beo* (also for *\*bhy-ijō*). We are reminded of *-no-* : *-nyo-* (§ 596 p. 138); and the same double forms reappear in the noun-suffix *-jo-* (I § 117 pp. 109 f., § 120 pp. 111 ff., II § 63 pp. 122 ff., III § 194 p. 74)

1) For the initial, cp. Zubatý, Archiv für slav. Phil., xiii 628.

2) The derivation of Ved. *yáda-māna-s yádura-s* from *yā-* 'go' (Grassmann, Wörtl., s. v. *yād*) is extremely doubtful.

which must be the same suffix as this of the verbs (compare such stems as Skr. *pū-ya-ti* 'stinks' *pū-ya-m* 'ill-smelling discharge, matter', § 487 pp. 41 f.).

Another point in common between the two suffixes is this. In some forms of the verb-system we find a weak grade, *-i-*, or *-ī-*. Examples are: *-i-*, Lat. 2<sup>nd</sup> sing. *cap-i-s*<sup>1)</sup> from *cap-iō*, O.H.G. 2<sup>nd</sup> sing. *hev-i-s* from *heffu* (= Goth. *haf-ja*), Lith. 2<sup>nd</sup> pl. *tūk-i-te* from *tik-iū*; examples of *-ī-*, Lat. 2<sup>nd</sup> sing. *farc-ī-s* from *farc-iō*, O.C.Sl. 2<sup>nd</sup> sing. *vel-i-ši* from *vel-ja*.<sup>2)</sup> This *-ī-* is not found in the present system of Aryan or Greek; and it is more than chance that these very languages have discarded the weak forms of the same sort from their declension of noun stems with *-io-*.

Details as to the Indicative Present will now be given.

Aryan and Greek as a rule have only *-io-* and *-ie-* interchanged, as in the other thematic classes. E. g. Skr. *hár-ya-mi* *hár-ya-si* *hár-ya-ti* etc., like *bhár-a-mi* *bhár-a-si* *bhár-a-ti*;<sup>3)</sup> Gr. *χαίρω* *χαίρεις* *χαίρει* etc. like *φέρω* *φέρεις*, and so forth.

Latin keeps only *-io-* and *-ī-*; e. g. *cap-iō* *-i-s* *-i-t* *-i-mus* *-i-tis* *-iu-nt*, *farc-iō* *-i-s* *-i-t* (for *-ī-t*); parallel to *farcīs* is Umbr. *heris* 'vis'.

In Keltic the inflexions are not all quite clear. With *-io-* we have nothing but the 1<sup>st</sup> sing. (O.Ir. *-lēcīu*) for certain; and *-ī-* can be shown in one or two persons (besides the isolated forms Mod.Cymr. imper. *bŷt bint*, see § 719); thus no doubt can be felt that there once existed a series of forms with *-io-* : *-ī-*. We see *-i-* or *-ī-* in 2<sup>nd</sup> sing. imper. O.Ir. *lēc*, 3<sup>rd</sup> pl. O.Cymr. *scamneġint* 'levant' *nertheñnt* 'they strengthen' (= O.Ir. *\*nertaiġit*), cp. 3<sup>rd</sup> sing. *istlinnit* 'he makes known'

1) The view that *cap-i-t* comes from *\*cap-īe-ti* (I § 185 p. 122) must be given up.

2) Goth. *vaúrkeis* (1<sup>st</sup> sing. *vaúrkeja*) can hardly be compared with such forms as Lat. *farcis* O.C.Sl. *veliši*; it is formed on the analogy of *fra-vardeis* = Skr. *vartaya-si* and the like (§ 781. 2).

3) Forms like Avest. *irišinti* as contrasted with Skr. *riṣ-ya-nti* prove nothing for Idg. *-i-* in Avestic. See Bartholomae, Handb. § 95 a Anm. 1 p. 41, and § 290 p. 126.



(O.Ir. *sluindid*) Mid.Cymr. *chwareid* 'plays'. Also O.Ir. 3<sup>rd</sup> pl. *-lēcet* may be *\*-lēt-* (*\*-lēto*), and the 1<sup>st</sup> pl. *-lēcem* may be *\*-lēmō(s)*; the 3<sup>rd</sup> sing. *-lēci* may be derived from *\*-lēt* or *\*-lējē-t*. The 1<sup>st</sup> sing. *lēcim* is a re-formate, like O.C.Sl. *bimī* Serv. *hvalim* (cp. *scaraim caraim*).

The same variation, *-jo-* : *-i-* (see above), is seen in Germanic. But here not only the 1<sup>st</sup> sing. and 3<sup>rd</sup> pl. have *-jo-*, but the 1<sup>st</sup> pl. as well (O.H.G. *heffe-mēs* Goth. *hafja-m*). We should therefore assume as the proethnic scheme in this branch, *-jō -i-zi -i-đi -ja-m -i-đi -ja-nđi*. The Gothic forms *haf-ji-s haf-ji-p* are in all probability instead of *\*haf-i-s \*haf-i-p*, on the analogy of *hafja hafjam hafjand* on the one hand, and *satja satjis* etc. on other; this view is supported by *liga ligis* etc. found instead of *\*lig-ja \*lig-i-s* (cp. O.H.G. *liggu ligis*).<sup>1)</sup> Thus it cannot be shewn that Germanic once had the same inflexion as Aryan and Greek.

This variation is found again in Balto-Slavonic; Lith. *lėž-iū lėž-i lėž-ia lėž-ia-me lėž-ia-te* like *sukū suki sūka sūka-me sūka-te*, O.C.Sl. *bor-ja bor-je-ši bor-je-tū bor-je-mū bor-je-te bor-jatū* like *bera bere-ši bere-tū bere-mū* etc. Also the variation *ī*, and here Lith. has regularly *-i-* while Slavonic has regularly *ī*; Lith. *smird-žiū smird-i smird-(i) smird-i-me smird-i-te* O.C.Sl. *smrěda smrěd-i-ši smrěd-i-tū smrěd-i-mū smrěd-i-te smrěd-eti* (§ 637 Rem. p. 176).

Lastly, in Armenian *-i-* (= Idg. *-i-* or *-ī-*) runs through all the persons, as *xaus-i-m* 'loquor' *-i-s -i* pl. *-i-mē -iē -i-n*.

In view of these facts it is likely that the parent speech had a twofold inflexion. Some of the *jo*-presents had *-jo-* : *-jē-* analogous to the variation between *-o-* : *-e-*, and others had *-jo-* : *-ī-*. The latter was found, if we may trust the evidence of the Balto-Slavonic group, in such *jo*-verbs as had an *ē*-stem as well as a *jo*-stem, as O.C.Sl. *mīnja mīnē-ti*; and if this be

1) The same levelling in late Old High German, *ligu* instead of *liggu* following *ligis*, *bitu* instead of *bittu* (Goth. *bidja*) following *bitis* (cp. Goth. *us-bida*).

so, *-iō-* : *-ī-* must be assumed for Greek stems like *μαίνο-μαι* (aor. *ἐμάνην*), cp. §§ 708, 727. As regards the question, which persons took *-iō-* and which took *-ī-*, two points may be considered certain. (1) The 1<sup>st</sup> sing. had *-iō* or *-iḡō*, and the 3<sup>rd</sup> pl. *-iō-nt(i)* or *-iḡō-nt(i)*.<sup>1)</sup> (2) *-ī-* was used with the 2<sup>nd</sup> and 3<sup>rd</sup> sing. and the 2<sup>nd</sup> pl., as also in the 2<sup>nd</sup> sing. imperative (Lat. *cape* for *\*capi*, *farcī*, O.Ir. *lēic*, O.H.G. *ligi*). The 1<sup>st</sup> plural seems to have had *-iō-*. Further details may be sought below.

§ 703. There is none of the formative suffixes of the present stem which is added so often as *-iō-* to stems which have some other suffix already. Compare Skr. *sn-ā-ya-tē* Lat. *nō* (for *\*snā-(i)ō*) beside Skr. *sn-ā-ti* Lat. *n-a-s*, Skr. *jñ-ā-yā-tē* O.H.G. *kn-āu* (ground-form *\*gñ-ē-iō*) O.C.Sl. *zn-a-je-tū* (ground-form *\*gñ-ō-je-t(u)*) beside Gr. *ἐ-γν-ω-ν*, Lat. *taceō* (for *\*tac-ē-iō*) Goth. *ṡahđi-ṡ* (for *\*tak-ē-je-ti*) beside Lat. *tac-ē-s* O.H.G. *dag-ē-s* (Class X §§ 578 ff.); Lesb. *κλίννω* (for *\*κλι-ν-ω*) beside O.Sax. *hli-nō-n* etc. (Classes XII, XIII § 611); Skr. *iṣ-an-yā-ti*, Gr. *ιαίνω* (for *\*i(n)-uv-ω*) beside Skr. *iṣ-ana-t*, Gr. *ὀλισθ-αίνω* beside *ὀλισθ-άνω*, O.H.G. *gi-wah-annu* beside Goth. *af-lif-na* (Class XIV §§ 616 ff.); Greek *πρίσσω* (instead of *\*πρινσ-ω*) Lat. *pīns-iō* beside Lat. *pīns-ō*, Lith. *jūng-iu* beside Lat. *jung-ō* (Class XVI §§ 627 ff.); Skr. *i-ṣ-ya-ti* beside *i-ṣa-ti*, Goth. *vah-s-ja* beside Avest. *vax-ša-iti*, Lith. *tē-s-iū* beside Skr. *tq-sa-ti* Goth. *-ṡin-sa*, Skr. *tr-as-ya-ti* Lith. *tr-es-iū* beside Skr. *tr-āsa-ti* Gr. *τρ-ί(σ)ω* (Class XX §§ 657 ff.), with which is associated the future of which we have examples in Skr. *dā-s-yā-ti* and Lith. *dū-s-iu* (§§ 747 ff.); O.C.Sl. *ištq* (for *\*isk-ia*) beside *iskq* (Class XXIII § 677), O.C.Sl. *ob-reštq* beside *-rē-tū?* (Class XXIV § 687); Skr. *yú-dh-ya-tē* beside *yō-dha-ti* Lith. *ju-dū*, Skr. *rā-dh-ya-tē* beside *ā-rā-dha-t*, Gr. *ῑσ-θ-ίω* beside *ῑσ-θω*, *κλύ-ζω* for *\*κλυ-δ-ω* as contrasted with *ἐ-κλυ-δο-ν*, Lith. *spráu-d-žiū* beside Mid.H.G. *sprie-ze*, Lith. *skél-d-žiū* beside *skél-du* (Class XXV §§ 688 ff.).

1) I consider Lat. *fiunt* to represent the old inflexion, and not Osc. *fiiet* *fi[ii]et*. The Oscan form took the ending of verbs in *-mi*, as did *censazet*. Cp. § 1022.

As a secondary suffix *-io-* originally bore the chief accent, which is usually kept in Sanskrit; *jñ-ā-yá-ti trā-yá-tē gr̥bhā-yá-ti* (§§ 734, 736); *iṣ-an-yá-ti*; fut. *dā-s-yá-ti*. Thus too the intensive Skr. *dē-diṣ-yá-tē* is a secondary form as contrasted with *dē-diṣ-tē*.

This puts in the right light the present formation of later denominatives, which generally have *-io-*, and that too with its original chief accent; e. g. Skr. *namas-yá-ti arāti-yá-ti pṛtanā-yá-ti gōpā-yá-ti* Gr. *τελείω* for \**τελεσ-ιω* etc. We thus see that denominatives had originally no special set of inflexions; their present system was the same as that of the Primary classes. Forms like 1<sup>st</sup> pl. Armen. *jana-mē* Gr. Aeol. *τίμα-μεν* Lat. *planta-mus* O.Ir. *no chara-m* Goth. *salbō-m* Lith. *jū'sto-me* were originally on the same level as Skr. *dr-ā-mas* Gr. *ἔδρ-α-μεν* Lat. *in-trā-mus*; and presents like Skr. *jīva-ti* Lat. *vīvi-t* O.C.Sl. *žive-tŭ* (from *jī-vá-s* etc.) were the same in principle as Skr. *āja-ti* Lat. *agi-t*. And to these such *io*-forms as Skr. *pṛtanā-yá-ti dēva-yá-ti* Gr. *τιμάω φιλέω* bore the same relation as Skr. *trā-yá-tē* to *trā-tē* (*trā-sva*), *dēdiṣ-yá-tē* to *dēdiṣ-tē* etc.

§ 704. So involved and so intricate are these questions, that it is practically impossible to present the history of the verbal *io*-suffix in such a way that it shall be clear in every point, and all the needs of the student be met at once. Such an attempt would make it necessary to treat the same material again and again from different sides; and for this we have not the space. Be it then expressly understood that the classification here given has been made with a view to giving a general grip of the subject; and many important principles have not been made so prominent as might be wished.

We classify Present Stems + secondary suffix *-io-* (§ 703) according to the original stems; and we count as separate Present Classes (viz. nos. XXVII to XXX) those in which the *io*-suffix, together with the particular kind of stem it may be attached to, has become a type for forms of some particular

kind. This is not the case with the *-io-* extension of present stems in *-sko-*, *-to-*, or *-dho-* *-do-*; wherefore the said stems are only mentioned in an excursus (§§ 762 ff.).

## Class XXVI.

Root + *-io-* *-iio-* forming the Present Stem.

§ 705. This Class falls into two divisions, in one of which the root-syllable, and in the other the thematic vowel carries the word accent. The root-syllable when accented has a strong grade of vowel (1<sup>st</sup> strong grade in the *e*-series), when unaccented is weak. (A) Accent on Root-Syllable: *\*ghér-io-* (Skr. *hár-ya-ti* Umbr. fut. *heriest*); (B) Accent on Thematic Vowel: *\*ghy-íō-* (Gr. *χαίρω*). Further examples of (A) are Skr. *tán-ya-ti* = Gr. *στέλω*, *pác-ya-tē*, *mád-ya-ti* (also Goth. *hafja* O.H.G. *heffu* 'I lift' pr. Germ. *\*háf-iō* = Lat. *cap-iō*?); and of (B), Skr. *mr-iyá-tē dṛś-yá-tē tud-yá-tē ś-yá-ti* (on the obliteration of this orig. difference of accent in Sanskrit, see § 710). A similar double series is seen in Class II, as Skr. *kárṣ-a-ti* and *kṛṣ-á-ti*, and in Class XIII, as O.H.G. *willu* and *wallu* (§ 513 pp. 78 f., § 607 p. 148).

§ 706. Proethnic Idg. — Type A., *\*ghér-io-*.

✓ *gher-*: Skr. *hár-ya-ti* 'takes pleasure in, desires', Umbr. *heris* 'vis' *heriest* fut. 'volet' Osc. *heriad* 'velit' (like *fakiiad* 'faciat'); cp. Gr. *χαίρω* 'I rejoice', type B. ✓ *yer-* 'hide, cover': Lat. *op-(v)eriō ap-(v)eriō* (*v* dropt after the labial as in *piu-s* for *\*pu-īō-s*, *suf-fīō -bō -bam*, see I § 170 pp. 149 f.),<sup>1)</sup> Lith. *už-veriu* 'I close, shut' *at-veriu* 'I open' (cp. Osc. *veru* 'portam' Umbr. *verof-e* 'in portam' and Lith. *var̃-tai* pl. 'door'). ✓ *sten-*: Gr. *στέλω* (beside *στένω*) 'I groan' Aeol. *τέννει* *στένει*, βρονχέται Hesych., O.C.Sl. *sten-jā* 'I groan, lament' (inf. *stena-ti*); the Skr. *tán-ya-ti* 'groans, roars' (cp. *stanayitnú-* beside *tanayitnú-* 'roaring, thundering') may come from *\*ten-io-* or

1) Another but less probable derivation of these Latin verbs is given in vol. I § 499 p. 366.

As a secondary s  
which is usually kept  
-yá-ti (§§ 734, 736);  
intensive Skr. *dē-diṣ-*  
with *dē-diṣ-tē*.

This puts in the  
denominatives, which  
original chief accent  
-yá-ti *gōpā-yá-ti* etc.  
that denominatives  
their present system  
classes. Forms like  
Lat. *plantā-mus* etc.  
were originally o  
-μεν Lat. *in-tra-*  
O.C.Sl. *žive-tŭ* etc.  
as Skr. *āja-ti*  
Skr. *pṛtānā-ya-*  
relation as S  
*dēdiṣ-tē* etc.

#### § 704.

that it is pr  
verbal *io-s-*  
point, and  
Such an a  
material a  
have not  
classificati

(cp. Skr. pass. *bhā-ya-tē*, not found in our texts), and their structure be the same as *\*tr-a-iō* (§ 735), compare § 495 p. 55.

§ 707. Type B: *\*ghy-īō*.

✓ *mer-* 'die' *\*mr-iō-* and *\*mṛ-iō-*: Skr. *mr-iyá-tē* Avest. *mer<sup>e</sup>-ye-iti*, Lat. *mor-ior* (I § 120 p. 112), cp. below *\*bhy-iō- \*bhu-iō-*. ✓ *der-* 'tear, flay': Skr. *dīr-yá-tē* for *\*dṛ-je-*, Lith. *dir-iū*; type A, Gr. *δεῖρω* Lesb. *δέροω*. ✓ *sper-*: Gr. *σπαίρω* 'I pant, struggle', Lith. *spīr-iū* 'I strike with my foot, kick'. ✓ *sgel-*: Gr. *σάλλω* 'I scrape, hack' for *\*σκυλ-ιω*, Lith. *skilū* (for *\*skil-iū*) 'I strike a light, kindle'. ✓ *men-* 'think of, meditate': Gr. *μαίνομαι* 'I am wild, enravished, mad', O.Ir. *do muiniur* 'I think or believe' (for *\*man-iō- \*mṇ-iō-*), O.C.Sl. *mǎn-ja* 'I think'; to either (A) or (B) may belong Skr. *mán-ya-tē* 'thinks' Avest. 1<sup>st</sup> sing. *man-ya* O.Pers. 2<sup>nd</sup> sing. conj. *maniyāhy* (I § 125 p. 116). ✓ *ghen-*: Skr. *han-yá-tē* 'is struck' instead of *\*ghan-yá-tē* (I § 454 Rem. p. 335), O.C.Sl. *žn-ja* 'I cut off, reap'; of type A from this root we have Gr. *θείνω*. ✓ *gem-* 'go': Skr. *-gam-yá-tē*, Gr. *βαίνω*, Lat. *ven-iō* (I § 204 p. 170, § 208 p. 174); *veniō* might also if we wished be classed as an example of type A. ✓ *bhey-* 'become, be' *\*bhy-iō-* and *\*bhū-iō-* (so above we had *\*mr-iō-* and *\*mṛ-iō-*): Gr. *\*φ(F)-ίω* implied by *φῖ-ρυ* (§ 713), Lat. *fīō* instead of *\*f(u)-iō* with *ī* following *fīs* etc. (§ 717), O.Ir. *b-iu*, A.S. *b-eó* (cp. § 722),<sup>1)</sup> Skr. pass. *-bhū-ya-tē*, Gr. Lesb. *φύω* (on Ion. Att. *φύω φύω* see § 523 p. 87, § 527 Rem. 2 pp. 90 f.); from the same root come Lat. *fī-liu-s* and Alban. *bin* 'I bud' (see G. Meyer, Alban. Stud. III 33, who however, as I think wrongly, assumes *bhī-* as a variant 'root' as well as *bhū-*). ✓ *dhey-* 'shake, stir

1) A different explanation of these verbs is given by Bartholomae, Stud. idg. Spr., II 189 ff., where we see *\*bhūiō* *\*bhūisi* *\*bhūiti* 3rd pl. *\*bhūiōnti* given as the proethnic forms. This does not agree either with the *ī* of A.S. and O.H.G. *bis* (§ 722), nor with the *ī* of Lith. *bi-ti* *-bi-me* etc. (§ 727); obviously the relation of Lith. *-bi-me* and O.C.Sl. *bi-mū* is the same as that of *smīrdi-me* and *smīrdi-mū*.

up': Lat. *suf-fiō* for *\*-fu-iō*, Skr. pass. *dhū-yá-tē* 'is shaken', Gr. Lesb. *θυίω* 'I storm, roar' (*θύω* *θύω* like *φύω* *φύω*, see above), O.Icel. *dý* 'I shake' (inf. *dý-ja*). *✓ qeḡ*: Skr. *ct-ya-tē* 'is tried, respected', connected probably with Gr. *τίω* 'I pay' (parallel form *τιώ*, cp. § 527 Rem. 2 pp. 90 f.); Arcad. *τιίω* either for *\*τει-ιω* (A), or more probably an ad-formate of *τίσω* *ἔτεισα*. Skr. *kṣi-yá-tē* 'is destroyed' *kṣi-ya-tē* 'exhausts itself, disappears'; from the same root is probably Gr. Hom. *φθίω* 'I am destroyed'. Skr. *pī-ya-ti* 'abuses, thinks little of', partic. Goth. *fijands* O.H.G. *ftent* ('foe'). *✓ uerḡ* 'work': Avest. *ver'z-ye-iti*, Gr. *ῥέζω* instead of *\*φράζω* *\*φραγ-ιω* (I § 299 p. 238), Goth. *vaúrk-ja*; Gr. *ἔρδω* O.H.G. *wirk(i)u* are of type A, § 706 p. 234. *✓ gherd-* (Lith. *gerdu-s* 'cry, message, news', Pruss. *po-gerdaut* 'to say'): Gr. *φράζω* 'I give to understand, announce', Lith. *gird-žiù* 'I apprehend, hear', ground-form *\*ghyd-iō*. *✓ ghredh-* (Goth. *gridi-* 'step, grade'): Skr. *gr̥dh-ya-ti* 'steps swiftly towards something', Lat. *grad-io-r* (cp. Osthoff, *M. U.* v p. III). *✓ leiq-* 'linquere': Skr. *ric-ya-tē* and pass. *ric-yá-tē*, Gr. *λίσσομεν* *ἐάσσομεν* Hesych.; cp. p. 129 with the footnote about Latin *licet*. Skr. *chid-yá-tē* 'is cut off', Gr. *σχίζω* 'I split' for *\*σχιδ-ιω*. Skr. *kup-ya-ti* 'gets in motion, gets excited', Lat. *cup-iō*, O.C.Sl. *kyplja* 'I flow in waves, boil' for *\*kyp-ja*. Gr. *\*φύζω* 'I flee', implied by Hom. *πεφυζότες* (Curt. Verb I<sup>2</sup> 327), Lat. *fug-iō*. Skr. *śuṣ-ya-ti* 'dries up, withers' (tr.), O.C.Sl. *sūšq* 'I dry' (intr.) for *\*sūch-ia* (inf. *sūcha-ti*); of type A we have Lith. *saus-iù* 'I dry' (intr.).

Gr. *κασσέω* 'I patch' for *\*κατ-σιῦ-ιω*, Goth. *siu-ja* 'I sew', Lett. *schu-ja* O.C.Sl. *šijq* for *\*siḡ-ia* 'I sew' (I § 60 p. 47, § 131 p. 118, § 143 p. 128, § 147 p. 132), Skr. *sīv-ya-ti* 'sews' (part. *syū-tá-s*). Gr. *πτύω* 'I spit, spew' for *\*(s)pīa-iō* (I § 131 p. 119), O.Icel. *spǫ* 'I spit, spew' (inf. *spǫ-ja*) for *\*spū-iō*, Skr. *ṣṭhīv-ya-ti* 'spits, spews', not actually found (partic. *ṣṭhyū-tá-s*), instead of *\*sthīv-ya-ti* (§ came from forms like *tīṣṭhēva abhi-ṣṭhyū-ta-s*, and then spread all over the verb; Bartholomae,

Ar. Forsch. III 34);<sup>1)</sup> of type *A*, Lith. *spiaũ-ju* O.C.Sl. *plju-ja* (I § 147 p. 132); Goth. *speiva* is either for *\*spīu-ō* parallel to Skr. *ṣhīvo-a-ti*, or for *\*spiey-ō* parallel to Lith. *spiaũ-ju* (so Streitberg, Idg. Forsch. I 513 f.).

Remark. On these roots with the variants *iū* and *iē*, see Bartholomae *loc. cit.*, Kretschmer in Kuhn's *Ztschr.* XXXI 386, Per Persson's *Wurzelerweiterung* 154 ff. As regards the variants *\*siū-iō* and *\*siy-iō*, *\*spīu-iō* and *\*spiey-iō*, it seems most likely that the ending *-iū-iō* is due to the analogy of those forms where *-iū-* preceded some sonant; to take an example, Skr. *ṣhīvyā-ti* being modelled after the fashion of *ṣhīva-ti* *ṣhīvita-s*, and *stīya-ti* following *sivaya-ti* *sīvana-m*; so also *dīvyā-ti* (beside *dyā-tā-s*) follows *-divan-* *divana-m* etc. (cp. Osthoff, *M. U.* IV 317); *vice versa*, Lith. *siū-ā* instead of *\*siy-ō* is due to the analogy of *siū-ti* etc.

✓ *dhē-* (*dhā-*, cp. Lat. *ad-fa-tim*) 'suck' *\*dhā-iō*: Skr. *dhā-ya-ti* 'sucks' (I § 109 p. 161), Goth. *da-ddja* 'I suckle' (I § 142 p. 127), O.C.Sl. *do-ja* 'I suckle'; parallel forms of type *A* are O.H.G. *tāu* 'I suckle' Lett. *dē-ju* 'I suck' common ground-form *\*dhē-iō*, cp. Skr. *dhā-yū-ṣ* 'thirsty'. ✓ *dē-* (*dā-*) 'bind': Skr. *d-ya-ti*, Gr. *δέω* for *\*dē-iū* instead of *\*dā-iū*, as *δε-τό-ς* for *\*dā-to-ς* = Skr. *dī-tā-s*. ✓ *stā-* (*stā-*) 'stare': Skr. pass. *sthī-ya-tē* instead of *\*stha-ya-tē* (§ 498 p. 61), O.C.Sl. *sto-ja* 'I stand', probably also O.H.G. *stēt* (§ 708 p. 240); parallel *A*-forms, Avest. *a-stā-yā* etc., § 706 p. 234.

With some roots ending in a vowel, the *i* of the present stem, being regarded as the root-final, was allowed to spread through other tenses. Side by side with Skr. *d-yā-ti* 'divides' (fut. *dā-sya-ti* etc.) is the bye-form *dā-ya-tē*, i. e. *\*dā-je-* (I § 109 a. p. 101), whence by analogy *dayi-tā-s* *day-aya-ti*; so too we notice *cha-ya-ti* *chayi-tvā* *chāy-aya-ti* beside *ch-ya-ti* 'cuts up' (partic. *chā-tā-s*). The pr. Greek form which answered to *dā-ya-tē*, to wit, *\*dā-iū*, regarded as made up thus *\*dāi-ω*, served as the starting point for *δαί-σω* *δαι-τέο-ς* *δαί-νυ-μι*, and from these again we get *δαί-ομαι*, which became associated in

1) Why Sanskrit has *-i-*, and not *-p-* like the rest, is unknown. This may be one of those pairs of doublets, such as Skr. *skambh-* and *stambh-* 'support', which cannot be regularly derived from a single original form.



one group with *δάσσομαι δάσσοσθαι*. *δα-ί-ο-μαι* may be compared with the Lith. *gu-i-jù* 'I hunt': from *gu-jù* (*gujaũ*) = Lett. *gu-ju* (bye-forms Lett. *gũ-nu* Lith. *gáu-nu*, § 615 p. 153) sprang *guì-siu guì-ti*; from these again come the presents *gui-jù* and *gui-nù*. Similarly we find Lith. part. pret. *sėj-ęs jój-ęs* from *sė-ju jó-ju* (*sėjau jójau*). The principle here exemplified throws light on such forms as Skr. *dhē-nú-ṣ* 'milking' beside Skr. *dhá-ya-ti* O.H.G. *tau*. Compare Per Persson's further remarks on this matter, *Wurzelerweiterung* pp. 115 ff.

Pairs of forms like Skr. *d-yá-ti : dá-ya-tē* recal the two forms of the *īṣ*-optative, seen for example in Idg. \**dh-īṣ-t* and \**dhā-īṣ-t*, § 939.

§ 708. A special class of verbs comprises those which have *-ē-* as parallel suffix to *-īo-*. Sometimes the *-ē-* is found only outside the present stem; sometimes both *-ē-* and *-īo-* are found in the present, in which case *-ē-īo-* occasionally takes the place of *-ē-*. The *-īo-* in Balto-Slavonic has regularly the ablaut *-ī-*; and I have already conjectured (§ 702 p. 230) that this ablaut is proethnic in this very class.

*-īo-* in the present with *-ē-* outside the present stem is seen in Greek and Balto-Slavonic. Take as examples: Gr. *μαίνομαι, ἐ-μάνη-ν μεμάνη-ώς μεμάνη-μαι μανή-σομαι*, O.C.Sl. *mānjā, mñě mñě-vũ mñě-chũ* (Lith. *mñė minė-siu*, on the pres. *menù* see below). *χαίρω, ἐ-χάρη-ν κεχαρη-ώς κεχαρή-σω*. *χαλω* (\**χαF-χω*) *ἐ-χάη-ν*. Lith. *smirdžiu smirdė-ti* O.C.Sl. *smrĭdĭq smrĭdĕ-ti* 'to stink'. In Slavonic, beside *govljā govĕ-ti* 'venerari, vereri' (: Lat. *favĕre*) we see also *govĕjā*, a later re-formate.

In Germanic we have the much discussed class of which one is Gothic *haban* 'to have' (the 3<sup>rd</sup> Weak Conjugation).<sup>1)</sup>

1) See Sievers, *P.-B. Beitr.* viii 90 ff.; Mahlow, *Lang. Voc. A, E, O*, pp. 12 f., 19 ff., and 148 f.; Kōgel in *P.-B. B.* ix 504 ff.; Bremer, *ibid.* xi 46 ff.; Kluge, in *Paul's Grundriss* i 379 f.; Streitberg, *Germ. Comp. auf -ōz-*, in the University Calendar of Freiburg in Switzerland, 1890,

Its connexion with the Balt.-Slav. *īo* : *ē*-class is shown by such forms as O.H.G. *dolēm*: Lith. *tylėti*, O.H.G. *lebēm*: O.C.Sl. *-lǫpěti* (Gr. ἀλιφῆ-ναι), Goth. *muna munáis*: Lith. *minėti* O.C.Sl. *mǫně-ti* (Gr. μυνῆ-ναι), Goth. *vita vǫdais*: Lith. *pa-vydėti* O.C.Sl. *vidě-ti*. *īo*-structure is seen in forms like O.Sax. 1<sup>st</sup> sing. *hebbiu libbiu* pl. *hebbiad libbiad* A.S. *hæbbe libbe*; *libbiu* = O.C.Sl. *-lǫplja*. Then we find *-ē-* in such as O.H.G. *habē-m habē-s* etc., and *-ē-* + *-īo-* in Goth. 2<sup>nd</sup> sing. *habái-s* 3<sup>rd</sup> sing. 2<sup>nd</sup> pl. *-ái-þ* (I § 142 p. 126).

Besides these, we find in Germanic other forms which an impartial critic cannot but regard as forms of our Class II; such, for example, are Goth. 1<sup>st</sup> sing. *haba* 1<sup>st</sup> pl. *habam* 3<sup>rd</sup> pl. *haband*, O.H.G. *habu* A.S. *hafu*.<sup>1)</sup> It is true that the West-Germanic forms could easily be explained as due to the analogy of other verbal forms; but the Gothic ones are incomprehensible if so regarded.<sup>2)</sup> Now in Balto-Slavonic and Greek, forms of Class II are found associated with *ē*-forms, as Lith. *menù minėti* as contrasted with O.C.Sl. *mǫnjā mǫněti*, O.C.Sl. part. *vidomŭ* beside *vidimŭ* from *viděti*, Gr. ἐθέλω ἐθέλωσιν (§ 727) — compare Umbr. *neiřhabas* 'ne adhibeant' beside *habe* 'habet' *habetu* 'habeto'. Another explanation is therefore possible, and to my mind more likely to be true. It is possible that in Germanic as well, some of the verbs in question had this form of the present stem, and that this *o*-type was made the rule for all verbs in Gothic. In that case, the relation of Goth. *haba* (O.H.G. *habu*) and O.Sax.

pp. 15 f., 18 ff., and 32; Sievers, in Paul Braune and Sievers' Beitr. xvi 257 ff.; Bartholomae, Stud. idg. Spr. ii 143 ff. Hirt, Idg. Forsch. i 204; Streitberg, Zur Germ. Sprachgeschichte, pp. 73 ff.

1) The 2<sup>nd</sup> and 3<sup>rd</sup> sing. O.H.G. *hebis hebit* may be examples either of *o*-flexion or of *īo*-flexion. It is quite certain that *hebita* and *ge-hebit* are the latter.

2) O.H.G. *habu* A.S. *hafu* may be instead of (O.Sax.) *hebbiu*, as O.H.G. *ligu* instead of *ligg(i)u* following *ligis* etc. On the other hand, we have no right at all to put Goth. *haba* on the same level as *liga* instead of *\*ligja* following *ligis* etc.

*hebbiu* might be compared with O.C.Sl. *vidomū* and *vidimū*, or with Lith. 3<sup>rd</sup> sing. *smirda* and *smirdi*. There is yet another possibility. With Streitberg, we may derive *hab-and* from *\*-ēndi*,<sup>1)</sup> and assume that *haba habam* were formed on the analogy of *batra batram* : *bairand*. There is nothing at all to be said for Hirt's conjecture that 1<sup>st</sup> sing. *haba* comes from *\*-ē-m*, with secondary personal ending.

That pr. Germanic also knew the inflexion with *-ē- + -iō-* seems to follow from O.H.G. *rērēm* 'I bellow, bleat, roar'; this word is akin to Lith. *rė-ju*, and points to pr. Germ. *\*rai-rē-iō* (§ 741). Compare further § 548 p. 105, on Goth. *rei-ra* 'I tremble, quake' 2<sup>nd</sup> sing. *rei-rái-s*, which is connected with Skr. *lē-láy-a-ti*.

In this group falls also O.H.G. *stēm stām* 'I stand', which varies between *a* and *ē* in all its persons. This must be due to an original series in which some persons had only *ē* and others only *a*. *a* comes from pr. Germ. *ē*, but *ē*, as the A.S. and O.Fris. *a* shows, comes from pr. Germ. *aī*. The verb is intimately connected with O.C.Sl. *stoją stojati* (for *\*stojē-ti*), in whose present stem *stoji-* (2<sup>nd</sup> sing. *stoji-ši* etc.) = Idg. *stō-ī-*, the *i* is as regular as in *ladi-ji* Lith. *mō-ji-s* and the like (vol. II p. 122 footnote 2); compare Skr. pass. *sthī-ya-tē* instead of *\*stha-ya-tē* (§ 707 p. 237, § 709). The *\*stojē-* of the infinitive stem cannot be original, because this suffix *-ē-* which we are now treating was added to the Root (in its weak grade), not to the present stem. *\*stojē-* is then doubtless a contamination of *\*st-ē-* and *\*sto-jī-* (similarly *la-jā la-ja-ti* 'to bark, give tongue' as contrasted with orig. Lith. *lō-ju lō-ti*, and Gr. *χαίρω ἑχαίρωσα* as contrasted with *χαίρω*, instead of *\*χuo-ρω, ἐχάωρον, χαρησοῦμαι*, and *κεχάωρημαι*). The two stems, *\*stō-īō-* and *\*st-ē-*, are combined in the West Germanic present scheme, which before levelling ran something like *stām stēs stēt stāmēs stēt stānt* (see Bremer, as cited, p. 43), i. e. *\*st-ē-mi*

1) In view of *vind-s* for *\*vē-nto-s*, Streitberg assumes that *ē* becomes *a* only in syllables not bearing the chief accent (p. 18).

\**sta-ii-zi* etc. *stām stāmēs stānt* run parallel to *habēm habēmēs habēnt*, and *stēs stēt* to *hevis hevit* (1<sup>st</sup> sing. *heffu*).

The verb *gām gēm* 'I go' is the exact counterpart of *stām stēm* in every respect. As to the origin of this verb many different theories have been set forth. If our explanation of *stām stēm* is right, it is advisable to link *gām gēm* with Skr. *ja-hā-ti* 'deserts, gives up' pl. *ja-hi-mas* aor. *á-hā-t*, *jí-hī-tē* 'goes, yields', in which case we must assume the stems \**gha-jo-* \**gha-ǵ-* and \**gh-ē-*. The latter stem reappears in Gr. *νί-χ-η-μι* *νί-χ-η-μεν*, if this verb belongs to the same root (§ 594 p. 135).

In Latin, the whole present scheme has *ē-*, and the 1<sup>st</sup> sing., but this person only, has *-jo-* in addition: *videō* for \**-ē-ǵō*, 2<sup>nd</sup> sing. *vidē-s* etc.: Lith. *pa-výdžiu -vydē-ti* Goth. *vita vitái-þ*. Compare further *rubeō*: O.C.Sl. *rūžda rūdē-ti*, and *valeō*: Lith. *galù galėti*, and so forth, § 590 p. 132. Italic likewise had at one time forms with *-jo-* (and without *-ē-*) in this group of verbs; this we see from Osc. *staít* 'stat' *stahínt* 'stant' Umbr. *stahitu* 'stato'. These imply a stem \**sta-ē-*<sup>1)</sup>, which must be regarded as for \**staj-ē-* and compared with O.C.Sl. *stoja-ti*; that is, it is a contamination of \**sta-jo-* and \**st-ē-*. Again, the *c* of *licet* beside *linquō* may perhaps justify our assuming an earlier \**liciō* for \**licy-ǵō* (Skr. *ricya-tē* Gr. *λίσσωμεν*); see p. 129 footnote. The *o*-present Umbr. *-habas* 'habeas' beside *habe* 'habet' has been spoken of already (pages 239 f.).

What conclusion is to be drawn from a comparison of the Greek and Balto-Slavonic with Germanic and Italic? It is natural to suppose that the two former divide *-jo-* and *-ē-* amongst their forms more nearly as the original language did; and that the latter came to have *ē*-forms in their present on account of their final confusion of Imperfect-Present with Aorist-Present, and the loss of the augmented preterite as an independent tense. Lat. *vidē-s vidē-tis* may be called injunctive,

1) For the proof that Osc. *í* must be orig. *ē*, and not orig. *ī*, I have to thank my pupil G. Bronisch.

and compared immediately with Lith. *mínė mínė-te* Gr. (ἐ)μάρη-ς (ἐ)μάρη-τε, the imperative *vidē* may be compared immediately with *minē-k*, which stood to *mínė* just as *dū'-k* to Skr. *á-dā-t*; and the only difference between O.H.G. *habēm habēs* etc., or Lat. *videt vident*, and these Lithuanian and Greek preterites is that they have the primary personal endings. Compare too Lat. *tagit* beside *tangit*, and others of the kind (§ 583 p. 125); compare too *dat* with preterite sense (Veg. Aen. i 79, ix 266, xi 172) like *-bat* (§ 505 p. 71 with footnote 2). This state of things was partly due to the analogy of *ē*-verbs with non-syllabic root; these carried the *ē*-suffix right through the verb; for example, Lat. *-pleō* for *\*pl-ē-iō -plēs* (Skr. *prā-si á-prā-t* Gr. *πλή-το*), Goth. *vaia* for *\*μ-ē-iō* (O.C.Sl. *vě-ja*, Skr. *vā-ti* Gr. *ᾠ-σι*). If in these the present and preterite both had originally *ē*, the connexion of the two would be very close when the preterite ceased to form a distinct category; it would then be quite natural for *ē*-verbs with syllabic root to run the *ē* right through the present, and, given Lat. *vidērem* (cp. O.C.Sl. *viděchŭ* Lith. *pa-vidėsiu* Gr. Dor. *ἰδῆσῶ*, § 813) and Lat. *vidē-bam vidē-bō*, to form a present *videō vidēs* etc. on the analogy of *-pleō* beside *-plērem plē-bam -bō*; or suppose we say, quite natural for existing injunctive forms such as *vidēs vidētis* to be treated as if they were the same in character as *-plēs -plētis*, and used for the present, soon to be followed up by *videō videt* etc. which filled the gaps in the system. This levelling and filling up of the gaps was completed in Latin by the beginning of the historical period; but in Germanic it never was completed at all. In Germanic all monosyllabic *ē*-stems, except two which crystallised, were absorbed by the *iō*- conjugation (§ 592); so the action of this principle can be clearly seen only with forms which contain *-ē- + -iō-*, as Goth. *vitāis vitáiþ*. The reason why Gothic chose to replace *\*vitaia \*vitaiaim \*vitaiaand* by *vita vitam vitand* to complete the tense lay in the number of syllables in these words.

Thus O.Sax. *libbiu libda* is a verb like Goth. *vaúrkJa*

*vaúrhta* (§ 722). The reason why we find in parallel use O.H.G. *lebēt* and Goth. *libáiþ* etc. is simply that in these languages there once was a non-present stem *\*líp-ē-*, but no such *ē*-stem was ever connected with *vaúrhtjan*.

We need not be surprised that it was *īo*-stems that became joined with *ē*-stems in one verbal system. Both these suffixes have at all periods been used by preference in making forms with intransitive meaning. Observe how *īo* is so used in the Aryan *ya*-passive (§ 710), and *ē* in the Greek aorist passive with *η* (§ 589 p. 130).

Lastly, I must foreguard against a misconception. In contrasting *īo* as a present suffix with *ē* in non-present stems, I must not be understood to mean that all non-present forms originally had *-ē-*. We have in Greek *κέκλυμαι κεντό-ς* beside *καίω: ἐκάην καήσομαι, μανοῦμαι μέμνην* beside *μαίνομαι: ἐμάνην μεμάνημαι*; so in Latin, *vidē vīsu-s* beside *videō, habui habitu-s* beside *habeō*, in Germanic pret. O.Sax. *habda* O.H.G. *hapta* O.Icel. *hafða* partic. *hafðr* beside O.Sax. *hebbiu:* O.H.G. *habēm* etc. How this *ē* managed to spread in non-present stems (as *καήσομαι* beside *καίω*, *μεμανηώς* beside *μέμνην*, O.H.G. *habēta* beside *hapta*), is a question which need not concern us here.

Remark. In § 583, page 125, we assumed an *ā*-aorist beside the *ē*-aorist, and explained *-ā-* in Lat. *occupāre* on the same principle as *-ē-* in *vidēre*. It is particularly easy to see resemblance between *vidēre* and *arāre*. *arō arās, arārem:* O.C.Sl. *orjā oruchū = videō vidēs, vidērem:* O.C.Sl. *vižda vižechū*.

§ 709. Aryan. Type A. Skr. *hár-ya-ti, raj-ya-ti pác-ya-tē, sphā-ya-tē, ā-dāya-māna-s*, Avest. *jaidyē-iti* O.Pers. *jadiyā-mīy*, Avest. *yezimna-*, Avest. *ā-stāya* O.Pers. *niy-āstāya*, Skr. *pás-ya-ti* Avest. *spas-yē-iti*, see § 706 pp. 233 f. Avest. *urvaes-yē-iti* 'moves, proceeds' (*urv-* for *vr-*, I § 157 p. 141), parallel *B*-stem *urvis-yē-iti*. Skr. *náh-ya-ti* 'binds' ✓ *nedh-* (part. *naddhá-s*). Skr. *nás-ya-ti* Avest. *nas-yē-iti* 'disappears, is destroyed' ✓ *nek-*. Skr. *pád-ya-tē* 'goes, falls', Avest. *pað-*

-*ye-iti* 'goes, gets somewhere' ✓ *ped-*. Skr. *mád-ya-ti* 'enjoys itself, carouses' beside 2<sup>nd</sup> sing. *mát-si* Class I.

Type B. Skr. *mr-iyá-tē* Avest. *mer<sup>e</sup>-ye-iti* (it is uncertain how we should read the O.Pers. 3<sup>rd</sup> sing. pret., whether as *amariyata* = Idg. \**e-mṛ-je-to* or as *amriyata* = Idg. \**e-mr-ije-to*, see I § 289 p. 231), Skr. *dir-yá-tē*, *han-yá-tē*, *-gam-yá-tē*, *-bhā-ya-tē*, *dhū-yá-tē*, *cī-ya-tē*, *kṣī-yá-tē* *kṣī-ya-tē*, *pī-ya-ti*, Avest. *ver<sup>e</sup>z-ye-iti*, Skr. *gṛdh-ya-ti*, *ric-yá-tē* *ric-ya-tē*, *chid-yá-tē*, *kup-ya-ti*, *śūṣ-ya-ti*, *śiv-ya-ti*, *ṣṭhiv-ya-ti*, *dhā-ya-ti*, *d-ya-ti* 'binds', *sthī-ya-tē*, *d-yá-ti* 'divides' *dá-ya-tē*, see § 707 pp. 235 ff.

Other, forms which have not the passive meaning. Skr. *jír-ya-ti* *jár-ya-ti* 'falls into decay' beside *jár-a-ti* Class II A and *jur-á-ti* Class II B. *dām-ya-ti* 'tames, conquers' for \**dṃ-je-ti*. *tām-ya-ti* 'grows stupefied, faint' for \**tṃ-je-ti*. *mī-ya-tē* 'grows less'. *pū-ya-ti* 'stinks'. *fj-ya-ti* 'rushes on'. *hṛṣ-ya-ti* 'is excited, or happy'. Avest. *pešyēinti* 'they fight' pr. Ar. \**pīt-ia-nti* (I § 260 p. 212). Skr. *drúh-ya-ti* 'tries to hurt', Avest. part. *drujint-* 'lying, deceiving' O.Pers. *adūrūjiya* (read *adurujiya*) 'lied'. Skr. *pra-diśya-ti* 'points to', Avest. *dis-ye-iti* 'shows, teaches'. Skr. *ś-yá-ti* 'whets', Avest. *s-ye-iti* 'cuts', ✓ *kō-*.

Passive. Skr. *kr-iyá-tē* Avest. *ker<sup>e</sup>-ye-tē* 'is made'. Skr. *str-iyá-tē* *stīr-ya-tē* 'sternitur', Avest. *strya-mna-* i. e. *striya-mna-*. Skr. *śīr-ya-tē* 'is broken to pieces', O.Pers. *asariyata* 'was killed', common ground-form \**kṛ-je-*. Skr. *bhr-iya-tē* Avest. *bairyeṭē* 'fertur', the Avestic form being for \**bhṛ-je-*. Skr. *yam-yá-tē* 'is held or inclined'. Skr. *śrū-yá-tē* 'is heard', Avest. *sru-ye-tē* 'is heard, heard of': cp. O.C.Sl. *po-slu-ja*, type A. Skr. *nī-yá-tē* 'is led, brought'. Skr. *dṛś-yá-tē* 'is seen'. Skr. *śas-yá-tē* 'is praised', O.Pers. 1<sup>st</sup> pl. *ḡah-yā-mahy* 'we are mentioned', ✓ *kens-*. Skr. *yuj-yá-tē* 'is yoked or harnessed'. *uc-yá-tē* 'is spoken', ✓ *ueq-*. *bhid-yá-tē* 'is split' (*bhid-ya-tē* 'splits, goes in two'). *idh-yá-tē* 'is kindled', ✓ *aīdh-*. *aj-yá-tē* 'is anointed' from *-añj-*. Avest. *da-ye-tē* 'is set, placed' ground-form \**dhə-je-tai*, ✓ *dhē-*; Skr. *dhī-yá-tē* like *sthī-ya-tē* (§ 707 p. 237) with the determinative *-ī-*.

§ 710. As a general rule, passive forms in Sanskrit accent -*yo-*, and non-passive forms the root. But this difference in accent had originally nothing to do with active or passive. It depended upon the grade of the root, strong or weak as the case might be. A few forms which are not passive still accent the suffix, as *ś-yá-ti mr-iyá-tē*, which is a relic of the former state of things. The retraction of accent in *dhá-ya-ti* (earlier \**dhā-īé-ti*) *dá-ya-tē* (instead of \**dā-īé-tai*, § 707 p. 237) *gṛdh-ya-ti ric-ya-tē* etc., which seems proved for protoethnic Aryan by the evidence of Avest. *pešyēinti*, § 709 (I § 260 pp. 212 f.), may be compared with the retraction in *dás-ya-ti gṛ-a-ti h̥-nva-ti gá-cha-ti* and the like (§ 516 p. 82).

The reason why the Middle of this particular present class became a Passive system in Aryan, is that the greater number of the verbs in it were intransitive; so in Greek a passive system grew out of an intransitive, I mean the passive aorist in -*ηr*, § 589 pp. 129 f. But not all the forms of the group can be called passive. To *mr-iyá-tē* 'dies', for instance, the term cannot be applied; nor can it to all aorists in -*ηr*, *ῥοῦν* 'flowed' for example.

So constant a mark of the passive did an accentuated -*yá-* become, that the intransitive *pác-ya-tē ric-ya-tē* were turned into passives by accenting them *pac-yá-tē ric-yá-tē*, and the language even tolerated *smar-yá-tē*, despite its strong root (cp. *hár-ya-ti*).

In Sanskrit, as in the two Iranian languages, passive forms occur with active personal endings, as well as middle; e. g. Skr. epic *dr̥ś-ya-ti* 'is seen' (Holtzmann, Gramm. aus dem MBh., 25 f.), Avest. *xwar-yē-iti* 'is eaten'. It is impossible to understand the forms till we know their accentuation.

Remark. It is sometimes said that the intr. active *dáhyati* 'burns up' as compared with the pass. *dahyáte* 'is burnt', since both practically mean the same thing, was the origin of the active forms with passive meaning, *dr̥śyati* and the like. This we could only venture to say if we knew for certain that the word was accented *dr̥śyati*.



§ 711. Armenian. Verbs in *-im*, which originally had middle or passive meaning: *xausim* 'loquer', *erevim* 'I appear'. This *i*-suffix was put to the same use as *-yá-* in Sanskrit, for making the passive conjugation. Each active verb in *-em* became middle or passive by the simple change of *e* to *i*. This often resulted in *i* being added to stems which had already some other present sign: e. g. *airni-m* 'I am made, I become' from *air-ne-m* 'I make'. The endings *-anim* and *-anem* are used side by side, as in Greek *-ainw* beside *-anw*; thus *mer-ani-m* 'I die' (aor. *mer-ay*) like Gr. *μυραίνω* 'I wear away, destroy'.

§ 712. Greek. Type A. *στείνω*, *ἔρδω*, *λεύσσω*, *ῥέζω* 'I colour', *θέσσεσθαι*, *πέσσω*, *ᾄζομαι*, *πλήσσω*, *κρώζω*, see § 706 pp. 233 f., *δείρω*, *τέλω*, see § 707 p. 236. Att. *φθείρω* Arcad. *φθήρω* Lesb. *φθέρω* 'I destroy', pr. Gr. *\*φθερ-ω* (akin to Skr. *kṣár-a-ti* 'flows, dissolves'); parallel *B*-stem, Dor. *φθαίρω*. Ion. *αίρω* Lesb. *αέρω* (*αύερω*?) 'I raise' for *\*ἀ-φερ-ω*; parallel *B*-stem Hom. Att. *αἶρω*. *πείρω* 'I pierce'; cp. O.C.Sl. *porjetŭ* 'cuts to pieces' (inf. *pratŭ*) for *\*př-je-*, type B. *στέλλω* 'I arrange, equip' for *\*στελ-ω*. *σκέλλω* 'I dry'. *κτείνω* Lesb. *κτέννω* 'I slay'; parallel in type B, Lesb. *κταίνω*. *χέζω* 'caco' for *\*χεδ-ω* (perf. *κέχοδα*). *δαίω* 'I kindle' for *\*δαF-ω* (perf. *δέδηε*): cp. Skr. pass. *dū-ya-ti*, type B. Of the same sort as *δαίω* are doubtless *καίω καῶ* 'I burn' and *κλαίω κλάω* 'I weep'; see I § 131 pp. 118 f.

Remark. *πλέω χεῖω* and the like, found in the text of Homer and Hesiod (Curtius, Verb i<sup>2</sup> 804 f.), can be explained *\*πλεF-ω* (Lith. *pláti-jū*) and so forth. But there is practically no objection to regarding them, as many scholars do, as corruptions for Aeolic forms of Class II, *πλέω = \*πλεF-ω*.

§ 713. Type B. *χαίρω*, *σπαίρω*, *σκάλλω*, *μαίνομαι*, *βυίνω*, *θνώ*, *τῶ*, *φθῶ*, *\*ράζω* 'I do', *φράζω*, *λίσσωμεν*, *σχίζω*, *πεφνυότες*, *κασσῶ*, *πτῶ*, *δέω*, *δαίω* 'I divide', see §§ 706 f. pp. 233 ff. *φθαίρω*, *αἶρω*, *κταίνω*, see § 712. *βάλλω* 'I throw' for *\*βαλ-ω* *\*gl-ēd*, *✓gel-*. *καίνω* 'I kill' probably for *\*καμ-ω*, compare *καμόντες* 'the dead' (then *ἐκανον* got *ν* from the present): Skr.

*śām-ya-ti* 'becomes still, is extinguishd' for \**kṣi-je-ti* (καίνω differently explained by Kretschmer, Kuhn's Zeitschr. xxxi 428, 432; Fick, i<sup>4</sup> 43). πύρω 'I make shy', cp. Lat. *cōn-ster-nā-re*, σῶρω 'I drag' cp. σαίρω 'I sweep' (with γλ), σκύλλω 'I tear to pieces, towse, worry' cp. Lith. *skelù* (\**skel-iù*) 'I split'; the *v* of this form needs explanation. δίω 'I beseech, fly, fear' doubtless for \**di-λω*: Skr. *dī-ya-ti* 'flies'; of type *A*, Lett. *dēi-ju* 'I dance' (inf. *dī-t*); the forms *δίετε* *δίεται* and such like were associated with *ἵετε* *ἵεται*, and this caused the formation of *ἐν-δίεσαν* *δίεμαι* and others by analogy of the parts of *ἵημι*. φράσσω 'I enclose' for \**φρακ-λω*: Lat. *farc-iō* with *ar* = *ḡ*, connected with *frequ-ēns*. μάσσω 'I press, knead' ground-form \**məq-ğō* ✓ *menq-*, cp. the forms, belonging to Class XXXII, O.C.Sl. *męcā* (2<sup>nd</sup> sing. *męci-ši*) 'I soften' (inf. *męci-ti*) Lith. *minkau* 'I knead' inf. *minky-ti*. σκάζω 'I limp' ground-form \**sqəq-ğō*, akin to Skr. *khānj-a-ti* 'limps'. νίζω 'I wash' ground-form \**nig-ğō*: Skr. pass. *nij-ya-tē*. σιρίζω 'I prick, pierce' for \**στιγ-λω*: O.H.G. *sticch(i)u* 'I stitch' (§ 722). λίσσομαι 'I pray' for λιτ-χο-μαι, cp. λιτ-έ-σθαι, Class II *B*. κνίζω 'I scratch, prick, stir up' for \**κνιδ-λω*, beside O.Icel. *hnú* 'I knock against, hurt with a knock' Class II *A*. ὀρύσσω 'I dig' for \**ὀρονκ-λω*: Lith. *rauk-iù* 'I wrinkle', (*A*). ἀπο-μύττω 'I blow my nose' for \**μυκ-λω*: Skr. pass. *muc-yá-tē* 'is set free'; Lith. *mauk-iù* 'I scratch slightly, touch softly', type *A*.

The theory that ὄζω 'I swell', for \**ōd-λω*, does not belong to type *A*, is doubtful, in spite of an appeal to Lith. *ū'd-žiū* 'I smell'; it is also uncertain to which section belongs ὄσσομαι 'I see', for \**oq-ğō-* (cp. I § 319 p. 258). It is risky to connect ὄσσομαι with Goth. *ah-ja* 'I believe, surmise'.

Forms with Idg. *-iğō-*. ἰδ-ίω 'I sweat' is usually connected directly with Skr. *svid-ya-ti* O.H.G. *swizzu*. If that is so, ἔξ-τίδισαι is due to the analogy of denominatives in *-i-ğō-* and ἰδτω (Aristoph.) is a reformaté like *κονίω* (§ 775). ἐσθ-ίω beside ἔσθω 'esse' for \**ed + dhō*, cp. § 694 p. 223, § 765. A form \**φίω* = Idg. \**bhy-iğō* follows from *φῖ-ρυ* 'sprout, shoot, scion' *φῖ-ρυ-ς* 'begetter', which must have been derived from it

as though the verbal stem were *φρ-* (§ 707 p. 235); a similar origin must be supposed for Lat. *fr-tu-m cupr-tu-s* and others (§§ 715 ff.).

§ 714. The identity of ending in *σφάζω ἔσφαξα* (*σφαγ-* 'slay') and forms like *φράζω ἔφραξα* (*φρακ-* 'enclose') produced *σφάττω* as a bye-form to *σφάζω*, by analogy with *φράττω*. *Vice versa*, we have *βράζω* in late Greek instead of *βράττω* (*βρατ-* 'seethe, bluster, roar') by analogy of such words as *φράζω* (*φραδ-* 'give to understand'), because almost all the forms of verbs in *-r-*, *-θ-*, and *-δ-* are alike except in the present stem, *ἔβρασ(σ)α* like *ἔφρασ(σ)α*, and so forth. See Mucke, *De Consonarum in Greca lingua geminatione*, 1 (1883) pp. 17 ff.; Osthoff, *Perfect* 296 ff. and 322 f.

As regards the relation of *μάλνομαι* to *ἐμάνην μεμάνημαι* *μεμανῶς μανήσομαι*, or of *χαίρω* to *ἐχάρην κεχαρηνῶς κεχαρήσοι*, see § 708 pp. 238 ff.

§ 715. *Italic*. In Latin, post-consonantal *-iō* became *-iō*, just as *\*mediu-s* became *mediu-s* (I § 135 p. 122); thus *morior* for *\*moriō(r)* *\*mriō*. In Oscan, *-iō-* is seen in *heriād* 'velit', and other words.

Lat. *in-ciēns* for *\*-cu-īe-* (as *sociu-s* for *\*socu-īo-s*, vol. I *loc. cit.*) beside *qu-eō* = Skr. *śv-āyāmi* (§ 790). So also *farcio* for *\*farcu-īō* beside *frequ-ēns*.

Why we have now *-i-* and now *-r-*, as in *cap-i-s farc-r-s*, no rule has so far been discovered to show. Often enough the same verb has both quantities, as *morī-mur* and *mori-mur*; so that we find in Latin both the peculiarities which we saw divided between Baltic and Slavonic (Lith. *smirdi-me* O.C.Sl. *smrīdi-mū*). In Umbrian and Oscan all the recorded forms have *-r-* — doubtless an accident: Umbr. *heris hereitu heritu* beside *heriest* 'volet' cp. Skr. *hár-ya-ti, an-ovihimu* 'induimino' (*ihi* == *r*) beside Lith. *aviù* 'I wear something on my feet' (1<sup>st</sup> pl. *āvi-me*).

As the present stems of which Lat. *farcio* is one were inflected just like denominatives in *-i-īo-* (§ 777), it cannot be

wondered at that the analogy of these denominatives caused non-present forms with *-i-* to be coined, such as *farci-tus* beside *fartu-s* from *farciō*; cp. § 713 on Gr. *ἔξ-ἰδίου* and *φι-rv*.

In the lists which follow below, *i* or *ī* is added in brackets to show the quantity of the weak-grade vowel in the 2<sup>nd</sup> singular etc.; and it is stated whether *ī* is ever found outside the present stem.

§ 716. Type A. Lat. *ap-(v)eriō op-(v)eriō* (*i*, *aper-ui aper-tu-s operī-mentu-m*): Lith. *ũž-veriu*, see § 706 p. 233. *fer-iō* (*i*, *feriī feri-tūru-s*): Lith. *bar-iũ* 'I scold' O.C.Sl. *bor-ja* 'I fight' and probably O.Icel. *ber* 'I strike' (inf. *berja*) from the ground-form *\*bhṛ-iō*, type B. Ital. *her-īo- her-ījo- her-ī-* in Umbr. *heris heriest hereitu* Osc. *heriad*, see § 706 p. 233, § 715. Lat. *spec-iō* (*i*, *spec-tu-s*): Skr. *pāś-ya-ti*, see § 706 p. 234. Umbr. *an-ovihimu* 'induimino': Lith. *av-iũ* 'I wear something on my feet' (1<sup>st</sup> pl. *āv-i-me* inf. *avē-ti*) and Lett. *āu-ju* 'I put something on my feet' (1<sup>st</sup> pl. *āu-ja-m* inf. *āu-t*) O.C.Sl. (*ob-)**u-ja*, same meaning (1<sup>st</sup> pl. *-u-je-mũ* inf. *-u-ti*). Lat. *pav-iō* (*i*, *pavi-vi pavi-tus*): Lith. *piāu-ju* 'I cut, mow, slay' (*piū-ti-s* 'slice, harvest'). *haur-iō* (*i*, *haus-tu-s haurī-tu-s*). *jac-iō* (*i*, *jac-tu-s*). *crōc-iō* (*i*, subst. *crōcī-tu-s*), see § 706 p. 234.

To the same group must belong Lat. *nōlī nōlīte*, from a lost verb *\*veliō*; cp. O.C.Sl. *veljā velē-ti* 'to command', O.H.G. 1<sup>st</sup> sing. *willu* 'I wish' Goth. *viljan viljands*, see § 505 p. 69.

*stō* (Idg. *\*stā-iō*) came under the influence of presents like *in-trō* for *\*tr-ā-iō*; hence *stās* etc. See § 584 Rem. p. 126. A similar explanation may be given of *for fatur*, see § 495 p. 56 and § 706 p. 234.

§ 717. Type B. Lat. *mor-ior* (*i* or *ī*, *mor-tuo-s mori-tūru-s*), Avest. *mer<sup>a</sup>-ye-iti*, see § 707 p. 235. *or-ior* (*i* or *ī*, *or-tu-s ori-tūrus*), ground-form *\*ṛ-iō-*, akin to Skr. *ṛ-ṇō-mi* § 639 p. 177. *par-iō* (*i*, *peperi par-tu-s pari-tūru-s, pariret*) for *\*pṛ-iō* (I § 306 p. 242). *re-periō* 'I bring to light again, find'

(ī, *-pertu-s*): Lith. *per-iū* (1<sup>st</sup> pl. *pēr-i-me*) type *A*. *fīō fī-s fiere fierī* (*fī-tu-m*, cp. Gr. *φῖ-rv* § 713 p. 247): O.Ir. *b-iu* etc., Idg. *\*bhū-īō*, see § 707 p. 235; *f-īō f-īunt* (instead of *\*f-īō \*f-iunt*) took *ī* from *fīs* etc., a peculiarity which is explained by the unique character of this verb — it is the only one in which the suffix *-īō* carried the chief accent; Osc. *fiiet* 'fiunt' with the ending *-ent* instead of *-ont* (p. 231 footnote). *suf-fīō* (*ī, -fī-vī -fī-tu-s*) ground-form *\*-dhū-īō*: cp. Skr. *dhū-yá-tē* etc., see § 707 p. 236. *in-ciēns* for *\*-cū-īe-*, cp. Gr. *ἐγ-κύνω* 'I am pregnant' and Lat. *qu-eō* (§ 715 p. 248); probably *-ciēns*: *-xύνω* = *fīō* (pr. Ital. *\*fū-īō*): *φύνω* Lesb. *φύνω*. *cliēns*, from *✓klej-* 'clinare' (Leo Meyer, Bezz. Beitr. v 182 f.), probably for *\*cli-īe-*: cp. Skr. pass. *śrī-ya-tē*. *grad-iōr* (*i, gressu-s; ag-gredior* with *i* or *ī*): Skr. *gr̥dh-ya-ti*, see § 707 p. 236. *lac-iō* (*i, -lectu-s*) for *\*l̥k-*, beside O.H.G. *locchōn* 'to entice' (Osthoff, *M. U.* v p. III). *farc-iō* (*ī, fartu-s farcī-tu-s*). *cup-iō* (*i, cuperet cupīret cupī-vī cupī-tu-s*): Skr. *kup-ya-ti* etc., see § 707 p. 236. *fug-iō* (*i, fūgī fugi-tūru-s*): Gr. *πιδυζότες*, see § 707 p. 236. *in-quiō in-quiunt* (*i*) for *\*sq-īō*, cp. *in-qu-a-m* (Class X § 583 p. 124) Gr. *ἐν-σπ-ε* 'said', *✓seq-*.

*suō* (*sū-tu-s*) and *spuō* (*spū-tu-s*) probably for *\*sū-(ī)ō \*spū-(ī)ō* as *neō* for *\*nē-(ī)ō*: Gr. *κυσσώω πτῶω* etc., see § 707 p. 236.

§ 718. It is often doubtful to which type, (A) or (B), a word belongs. *ven-iō* (*ī, vēnī in-ventu-s*), beside Skr. *-gam-yá-tē* etc., see § 707 p. 235. *cap-iō* (*i, cēpī cap-tu-s*): Goth. *haf-ja* O.H.G. *heff(i)u* 'I lift up'. *sap-iō* (*i, sap-uī sapī-vī*): O.H.G. *int-seff(i)u* 'I mark'. *ap-iō coepiō* (*i, aptu-s*); cp. § 600 p. 144 on Skr. *ap-nō-mi*. *sal-iō* (*ī, sal-uī salīī*): Gr. *ἀλλομαι* 'I leap' for *ἀλ-ιο-*. *fod-iō* (*i, fossu-s, fodī-rī*).

§ 719. Keltic. It is difficult to understand the Keltic inflexions, because the Third Conjugation in Irish has absorbed all Denominatives in *-īō -e-īō* and *-i-īō*, and all Causals in *-e-īō*. General remarks on the *īō*-conjugations in § 702 pp. 229 f.

An account of the confusion in Irish between the First and Third Conjugations is given in § 520 p. 84.

Type A. O.Ir. *-lēciu* 'I leave, let' for *\*leikṡ-iō* (I § 436 Rem. p. 325): Skr. *ric-ya-tē* etc., type B, see § 707 p. 236. *midīur* 'I give judgement or opinion', beside Gr. *μέδομαι* 'I meditate upon'. *-ciu* 'I see' for *\*ces-iō*.

*-tau -tō* 'I am' for *\*stā-iō*: Avest. *a-stā-yā* etc., see § 706 p. 234. For the inflexion of this present stem see § 584 Rem. p. 126.

Type B. O.Ir. *do muiniur* 'I think, believe' for *\*man-iō* Idg. *\*mṡ-iō*: Gr. *μαίνομαι* etc., see § 707 p. 235. *-gainedar* 'is born' from *√gen-*: cp. Gr. *γείνομαι*, type A. *biu* 'I am' for *\*bhṡ-iō*: Lat. *fīō* etc., see § 707 p. 235; the stem *\*bhṡ-i-* must be contained in Mid.Cymr. imper. 3<sup>rd</sup> sing. *bit* 3<sup>rd</sup> pl. *bint* (but Mod.Cymr. *bydd-* for *\*bij-*), while *-iē- -iō-* is the suffix in Ir. 3<sup>rd</sup> sing. *biid bīth bīd* 3<sup>rd</sup> pl. *biit bīt* and 1<sup>st</sup> pl. *-biam* 3<sup>rd</sup> pl. *-biat*. *-gniu* 'I make' for *\*ḡn-iō* *√gen-* 'gignere', goes like *biu*.

Belonging to either (A) or (B): Mid.Ir. *airim* 'I plough': Goth. *ar-ja* Lith. *ar-iū*.

§ 720. Germanic. On the *iō*-suffix here, see § 702 p. 230. There was a confusion between some persons of the present in this class and those of Denominatives in *-e-iō* or *-i-iō*, and Causals in *-e-iō*. This caused a general commingling of the forms, reaching to non-present stems; the course of which it is very difficult to trace.

Verner's Law (I § 529 pp. 384 ff.) proves that some verbs were accented on the root in protoethnic Germanic: Goth. *haf-ja* O.H.G. *heff(i)u* Goth. *skap-ja* (pret. *skōþ*), beside O.H.G. *int-seff(i)u*. See § 705 p. 233. In *skap-ja* the accent seems to have been shifted, as in Skr. *ḡj-ya-ti* etc. (§ 710 p. 245); for Gr. *ἀσκητής* 'scatheless', which must be connected with *skap-ja* (pret. *skōþ*), points to a *√skath-*. That Germanic inherited forms with an accented suffix, type B (cp. *mr-iyá-tē tud-yá-tē*) seems to follow from O.Sax. *thiggian* A.S. *dicgean*

'to receive, assume' from  $\sqrt{teq-}$  (Lith. *tėk-ti* 'to reach') and A.S. *friczean* 'to experience' from  $\sqrt{prek-}$  (Lat. *precārī*).

On present stems with *-jo-* as bye-forms of the *ē*-present, such as O.Sax. *hebbiu* beside O.H.G. *habē-m* (Goth. *haba habái-s*), see § 708 pp. 238 ff.

§ 721. Type A. O.H.G. *wirk(i)u* 'I work' (pret. *worhta worahta*): Gr. *ῥοδω*, see § 706 p. 234; parallel *B*-stems O.H.G. *wurk(i)u* Goth. *vaúrkja*. O.H.G. *liggh(i)u* 'I lie' (pret. *lag*), O.Icel. *ligg* (inf. *liggja*) from  $\sqrt{leg-}$ ; Goth. *liga* instead of \**ligja* follows *ligis* etc., as in later O.H.G. we get *ligu* instead of *ligg(i)u* following *ligis* etc. (§ 702 p. 230). O.H.G. *sizzu* 'I sit' (pret. *saz*), O.Icel. *sit* (inf. *sitja*): compare probably *πιέζω* 'I press' (lit. 'I sit upon') for \**πι-σεδ-ιω* (cp. Skr. pass. *pīdyatē* for \**pi-zd-īe-*), perhaps also *ἔζομαι* (see § 563 p. 111); Goth. *sita* like *liga*. Goth. *ga-hvatja* 'I incite' (part. *hvassa* 'whetted, sharp') O.H.G. *wezzu* 'I whet, sharpen' (pret. *wazta*), beside Skr. *cud-* (pres. *cōda-ti*) 'to inflame, incite'. Goth. *hlah-ja* 'I laugh' (prep. *hlōh*). Goth. *saia* O.H.G. *sāu* 'I sow', pr. Germ. \**sē-jō*: Lith. *sė-ju*, see § 706 p. 234. O.H.G. *tau* 'I suckle' ground-form \**dhē-jō* beside Goth. *da-ddja* (*B*), see § 707 p. 237.

§ 722. Type B. O.Icel. *ber* 'I strike' (inf. *berja*, pret. *barða*) pr. Germ. \**bar-jō* ground-form \**bhḡ-jō*: Lith. *bar-iù*, see § 716 p. 249. Goth. *hul-ja* (pret. *hulida*) O.H.G. *hull(i)u* (pret. *hulta*) 'I cover, hide' ground-form \**kl-jō*, beside O.H.G. *hilu* 'I conceal'. O.Icel. *symja* 'to swim' beside *svima*, pret. *svam*, pr. Germ. \**s(y)um-ja-*. A.S. *beó* 'I am' ground-form \**bh(y)-i-jō*, 2<sup>nd</sup> and 3<sup>rd</sup> sing. *bis bið* 3<sup>rd</sup> pl. *beoð* (part. *beónde*), O.H.G. 2<sup>nd</sup> sing. *bis bist* (for its 1<sup>st</sup> sing. we have *bim*, see § 507 pp. 73 f.): Lat. *fiō* etc., see § 707 p. 235. O.Icel. *dý* 'I shake' (inf. *dý-ja*, pret. *dū-ða*): Skr. *dhū-yá-tē* etc., see § 707 p. 236. O.Icel. *lǫ* 'I destroy, shatter, crush' (inf. *lǫ-ja*, pret. *lū-ða*): Gr. *λῶω* (cp. § 527 Rem. 2 pp. 90 f.). Goth. *vaúrk-ja* (pret. *vaúrhta*) O.H.G. *wurk(i)u* (pret. *worhta*) 'I work' beside O.H.G. *wirk(i)u*, type A: Avest. *ver'z-ye-iti* etc., see § 707 p. 236,

§ 721. Goth. *þaurseiþ mik* 'I thirst', lit. 'it thirsts me' (pret. *þaurside*): Skr. *tṛṣ-ya-ti* 'thirsts'. O.H.G. *gurt-(i)u* 'I gird' (pret. *gurta*), beside Goth. *gairda* Class II A. O.H.G. *wurg(i)u* 'I throttle' (pret. *wurcta*): Lett. *wirschu* 'I jerk' (inf. *wirft*): parallel we have Lett. *werfchu* (*we'rfchu* and *wérfchu*) 'I turn, twist' Lith. *verž-iù* 'I tie', type A. Goth. *þugk-ja* 'I think' (pret. *þūh-ta*); parallel *þagk-ja*, which may answer to Lat. *tongeō*, see § 894. Goth. *bug-ja* 'I buy' (pret. *baúhta*). Goth. *bidja* O.H.G. *bitt(i)u* 'I beg, pray', ground-form *\*bhidh-ið*  $\sqrt{bhejdh-}$ , whose pret. is *baþ bat* following words like *sat* (I § 67 Rem. 3 p. 57); Goth. *us-bida* O.H.G. *bitu* a re-formate like *liga*, see § 702 p. 230. O.H.G. *int-rihhit* 'revelat', later *-rihhit* (part. *int-rigan*). O.H.G. *sticch(i)u* 'I embroider, stitch' (part. *ki-stickit*): Gr. *σιζω*, see § 713 p. 247. O.H.G. *swizzu* 'I sweat' (pret. *swizta*): Skr. *svid-ya-ti* 'sweats': the suffix *-iðo-* is perhaps seen in Gr. *ῥιδ-ιω* (§ 713 p. 247). Goth. *skap-ja* 'I hurt' (pret. *skōþ*), cp. Gr. *ἀ-σκηθής* 'unscathed', § 720 p. 251. O.H.G. *ita-ruch(i)u* 'rumino': Lith. *rūg-iu* 'I gulp, belch'. O.H.G. *scutt(i)u* 'I shake, shatter' (pret. *scutta*): cp. Lat. *quat-iō -cutiō*.

Goth. *siu-ja* 'I sew': Gr. *κασσῶ* etc., O.Icel. *spý* 'I spew' (pret. *spjó* and *spūða*): Gr. *πρῶ* etc. See § 707 p. 236. Goth. *da-ddja* 'I give suck': Skr. *dh'i-ya-ti* etc., see § 707 p. 237.

§ 723. We are often in doubt whether forms belong to (A) or (B). Goth. *haf-ja* O.H.G. *heff(i)u* 'I lift up' (pret. *hōf, huob*): Lat. *cap-iō*. O.H.G. *int-seff(i)u* 'I mark' (pret. *-suab*): Lat. *sap-iō*. Goth. *ar-ja* O.H.G. *er-iu* 'I plough' (pret. O.H.G. *iar ier*): Mid.Ir. *airim* Lith. *ar-iù* O.C.Sl. *or-ja* 'I plough'. O.H.G. *swer-iu* 'I swear' (pret. *swuor*).

In quite a large number of the above named verbs with weak preterites it is doubtful whether the original ending of the present ought not rather to be assumed as *-éiō* (Class XXXII). Thus, for example, Goth. *hulja* may be derived from *\*kʰl-éið*, with the same weak root-syllable as is found in Skr. *turáya-ti* and elsewhere (§ 790).



§ 724. Balto-Slavonic. We first deal with forms of which the type is seen in Lith. *lėž-iù lėž-ia-me* O.C.Sl. *bor-ja bor-je-mŭ*. Next, the type Lith. *smird-žiù smird-i-me* O.C.Sl. *smrĭžda smrĭd-i-mŭ* (see § 702 pp. 230 f.). These are combined with a different formation in the infinitive stem, for which reason we add the infinitive in each case.

§ 725. 1. Forms with *-io-* *-ie-* running right though.

Type A. Lith. *už-veriu* 'I close, shut' (*-ver-ti*): Lat. *op-(o)eriō*, see § 706 p. 233. *ger-iù* 'I drink' (*gér-ti*). *kelù* (*\*kel-iù*) 'I lift, raise' (*kél-ti*). *želù* (*\*žel-iù*) 'I grow green' (*žél-ti*). O.C.Sl. *mel-ja* 'I grind' (*mlěti* for *\*mel-ti*). *stel-ja* 'I stretch out, spread' (*stĭla-ti*). *sten-ja* 'I sigh' (*stena-ti*): Gr. *στένω*, see § 706 p. 233. *vem-iù* 'I vomit' (*vém-ti*).

Lith. *pláu-ju* 'I wash, lave, rinse' (*pláu-ti*), O.C.Sl. *plu-ja* 'I swim, sail on board ship' (*plu-ti*, parallel *plovā plu-ti*), ground-form *\*pley-iō*. Lett. *áu-ju* (*áu-t*) O.C.Sl. (*ob-ju-ja* (*-u-ti*) 'put on covering to the feet' (Lith. *aunù* instead of older *\*au-ju*), ground-form *\*ey-iō*, cp. Lith. intrans. *av-iù av-ė-ti* § 727. Lith. *száu-ja* 'I shoot' (*száu-ti*), O.C.Sl. *su-ja* 'I throw, sling' (*sov-a-ti*), ground-form *\*skeu-iō*.

Lett. *lēi-ju* (*lī-t*) Lith. *lē-ju* (*lė-ti*) 'I pour' for *\*lei-iō*, compare perhaps with O.C.Sl. *li-ja* 'I pour'. Lett. *slēi-ju* (*slī-t*) Lith. *szlē-jù* (*szlė-ti*) 'I lean against, support', cp. Lith. *szlei-vi-s szlei-va-s* 'bandy-legged', ✓ *klei-*. Lett. *smēi-ju* 'I laugh' (*smī-t*), ✓ *smei-*. Lith. *lē-ju szlē-jù*, possibly for the regular *\*lei-ju \*szlei-ju* by analogy of *lė-ti lė-tu* etc., cp. I § 68 Rem. 2 p. 61.) O.C.Sl. *li-ja* may be placed under Type B (§ 726) along with Lith. *ly-jù* 'I rain' *pa-szly-ju* 'stumble'. Parallel are *ļjā* and *lējā*, also *smējā sē* 'I laugh' *zējā* 'hio'. These latter forms, analysed as *lēj-a smēj-a zēj-a*, belong with *sēk-a* 'I hew, cut' to Class II A (cp. Gr. *μῆδομαι* etc. § 514 p. 81), and

1) Unsatisfactory as this hypothesis seems, I think it better than the one set forth by Hirt in *Idg. Forsch.* i 33 ff.

we must connect with them the Lettic preterites *lēj-u smēj-u slēj-u*.<sup>1)</sup>

Lith. *vercziù* 'I turn' (*verš-ti*). *verk-iù* 'I cry' (*veřk-ti*). *szelp-iù* 'I help, support' (*szel̥p-ti*). *sreb-iù* 'I sip, lap' *srēp-ti*; also *sreb-iù* (by levelling with *srēbiau srēpti*) and *srob-iù* (*srōp-ti*). O.C.Sl. *črēplja* 'I make, create' for \**kerp-ja* (*črēpa-ti*). *plēžq* 'I crawl' for \**pelz-ja* (*plēza-ti*).

Lith. *blend-žiū-s* 'I grow dark', said of the sun (pret. *blendžiau-s*).

Lith. *lauk-iu* 'I wait for, expect' (*lauk-ti*): Gr. *λείσσω*, see § 706 p. 234. *rauk-iù* 'I wrinkle' *rau̯k-ti* ✓ *reyq-*, cp. Gr. *ὀρύσσω* (B) § 713 p. 247. *mauk-iù* 'I rub smooth' (*mau̯k-ti*) ✓ *meyq-*, cp. Skr. *muc-yá-tē* etc., see § 713 p. 247. *praus-iù* 'I wash my face' (*praūs-ti*), cp. Skr. *vi-pruṣya-ti* 'spurts out, trickles'.

Lith. *lėž-iù* (*lėsz-ti*) O.C.Sl. *ližq* (*liza-ti*) 'I lick', ground-form \**leiğh-iō*, cp. Skr. par. *lih-ya-tē*, (B). Lith. *pėsz-iu* (*pėsz-ti*) O.C.Sl. *pišq* (*pīsa-ti pīsa-ti*) 'I write', ground-form \**peṣk-iō*, cp. Skr. *piś-yá-tē* 'is made ready, fitted up', (B). Lith. *žėd-žiu* 'I form, shape' (*žėsti*), O.C.Sl. *ziždq* 'I form, build' (*zīda-ti*).

Lett. *dedfu* 'I burn' trans. for \**deg-iu* (*deg-t*): Skr. *dah-ya-ti*, pass. *dah-yá-tē*, ✓ *dhegh-*. O.C.Sl. *češq* 'I strip off, comb' (*česa-ti*), ✓ *ges-*.

Lith. *rėž-iu* 'I cut, tear' (*rėsz-ti*), O.C.Sl. *rěžq* 'I cut' (*rěza-ti*). Lith. *jėg-iù* 'I have power, I can' (*jėk-ti*), beside Gr. *ἔβην*. Lith. *ū'd-žiu* 'I smell' (*ū'sti*), cp. Gr. *ὄζω* § 713 p. 247. O.C.Sl. *plačq* 'I cry, lament' (*plaka-ti*): Gr. *πλήσσω*, see § 706 p. 234. Lith. *krok-iù* *krog-iù* 'I give the death rattle, grunt' (*krōk-ti*): Gr. *ροῶζω* etc., see § 706 p. 234.

Lith. *spė-ju* 'I have leisure or space' (*spė-ti*), O.C.Sl. *spě-ja* 'I succeed' (*spě-ti*): Skr. *sphā-ya-tē*, see § 706 p. 234. Lith. *sė-ju* (*sė-ti*) O.C.Sl. *sě-ja* (*sě-ti*) 'I sow': Goth. *saiā*, see § 706 p. 234. Lett. *dé-ju* 'I lay eggs' (*dé-t*), O.C.Sl. *dě-ja* 'I lay,

1) Zubatý's derivation of *zējā* from \**ziā-ia* (Lith. *zió-ju*) is wild in the extreme (Archiv slav. Phil. XIII 623).

set, place' (*dē-ti*): Skr. 3<sup>rd</sup> sing. mid. *a-dhā-ya-ta* 'he placed for himself'. Lith. *stó-jũ-s* 'I place myself, take my stand' (*stó-ti-s*), O.C.Sl. *sta-jā* 'I place myself' (inf. *sta-ja-ti*): Avest. *a-stā-yā* etc., see § 706 p. 234.

Lith. *spiaũ-ju* (*spiaũ-ti*) O.C.Sl. *plju-jā* (*pljŭva-ti*) 'I vomit', cp. Gr. *πρῶω* etc., (*B*); see § 707 p. 236. O.C.Sl. *žu-jā* 'I chew', a bye-form of *žŭ-a*, Class II *B*, § 534 p. 95.

§ 726. Type *B*. Lith. *dir-iũ* 'I flay' (*dir-ti*): Skr. *dīr-ya-tē*, see § 707 p. 235. *spir-iũ* 'I kick' (*spir-ti*): Gr. *σπαίρω*, see *ibid.* *skir-iũ* 'I part, cut' (*skīr-ti*) ✓ *squer-*. *gir-iũ* 'I praise' (*gīr-ti*), beside *gēr-as* 'good'. Lith. *bar-iũ* 'I scold' beside *bar-ũ* (*bār-ti*), O.C.Sl. *bor-jā* 'I fight' (*brati* for *\*bor-ti*), ground-form *\*bhŕ-iō*: O.Icel. *ber* 'I strike' (inf. *berja*) for pr. Germ. *\*bar-iō*, which probably comes from a form *\*bhŕ-iō*; on the other hand, we have Lat. *fer-iō* following type *A* (§ 716 p. 249). Lith. *skilũ* (*\*skil-iũ*) 'I strike fire, kindle' (*skil-ti*): Gr. *σκάλλω*, see § 707 p. 235. Lith. *kalũ* (*\*kal-iũ*) 'I strike, forge' beside *kal-ũ* (*kāl-ti*), O.C.Sl. *kol-jā* 'I slaughter' (*klati* for *\*kol-ti*), ground-form *\*qŕ-iō*.

O.C.Sl. *žŭn-jā* 'I cut off, reap' (*žę-ti*): Skr. *han-yā-tē*, see § 707 p. 235.

O.C.Sl. *ry-jā* 'I grub up, dig' (*ry-ti*) beside *rŭv-a* 'I tear out', Class II *B*, O.H.G. *riu-ti* 'land made fruitful by digging'; Lith. *ráu-ju* 'I pull out of the earth, pull up' (*ráu-ti*), (*A*). Lith. *ly-jũ* 'I rain' (*lŷ-ti*) with which O.C.Sl. *li-jā* is perhaps connected; parallel Lith. *lė-ju*, (*A*), § 725 p. 254. Lith. *gy-jũ* 'I get well, revive' (*gŷ-ti*).

Lith. *rũg-iu* 'I gulp, belch' (*rũk-ti*): O.H.G. *ita-ruch(i)u* 'rumino'. *grũd-žiu* 'I stamp' (*grũs-ti*). O.C.Sl. *sũšq* 'I dry' for *\*such-iā* (*sũcha-ti*): Skr. *śũṣ-ya-ti*, see § 707 p. 236. *lũžq* 'I lie' for *\*lũg-iā* (*lũga-ti*). *pšq* 'I strike, rub' (*pšcha-ti*): Skr. *piṣ-ya-tē* 'is broken or crushed to bits'.

Lett. *schu-ju* for *\*sju-iu* (pret. *schuw-u* inf. *schũ-t*), O.C.Sl. *šija* for *\*sij-iā* (*ši-ti*) 'I sew': Gr. *ᾠασσῶ* etc., see § 707 p. 236.

§ 727. (2) Forms with *-jo-* : *-ĭ-*. There is no evidence that *-jo-* was originally dissyllabic. This cannot be inferred from the Lithuanian *av-iù srav-iù* (1<sup>st</sup> pl. *āv-i-me srāv-i-me*) as contrasted with *pláu-ju* (1<sup>st</sup> pl. *pláu-ja-me*); these may have been influenced by persons with the stem *av-i- srav-i-*. The weak grade is regularly *-ĭ-* in Lithuanian (compare future with *-s-i-*, § 761) and in Slavonic regularly *-ĭ-*. It appears also in the 3<sup>rd</sup> plural and the participle, Lith. *smirdint-* O.C.Sl. *smrĭdet-*, while here the original form was most likely *-jo-*; on O.C.Sl. *smrĭd-et-* for *-int-*, see § 637 Rem. p. 176.

Idg. *\*bhū-ijo-* *\*bhū-ĭ-* from  $\sqrt{bhe\gamma}$  'become, be' (§ 707 p. 235) has many descendants in Balto-Slavonic. Lith. 3<sup>rd</sup> sing. *bi-ti bi-t* 'erat' (erant)', which is irregular in having a primary personal ending; plural 1<sup>st</sup> pers. *sùktum-bime* 2<sup>nd</sup> *-bite* dual 1<sup>st</sup> *-biva* 2<sup>nd</sup> *-bita*, old injunctives, first used with preterite meaning, now in clauses expressing a wish.<sup>1)</sup> With the pr. Lith. present *\*bijù* is closely parallel the Lettic preterite *biju* 'eram' *biji bija* pl. *bijām bijāt*, which is related to Lat. *fīam* (instead of *\*fiam*) as Lith. *buvaũ* to Lat. *fuam*. Along with these goes the Slavonic conditional (impossible condition), originally a preterite injunctive formation, made up with *bi-mĭ* *bi bi bi-mü*;<sup>2)</sup> the 1<sup>st</sup> sing. has got a primary personal ending, like Lith. 3<sup>rd</sup> sing. *biti*. For the 2<sup>nd</sup> pl. they used *biste*, a form of the *s*-aorist; to fill up gaps, the 1<sup>st</sup> pl. *bichomü* and 3<sup>rd</sup> pl. *bišę* were coined by analogy (cp. O.C.Sl. *běchomü* from *bě* § 587 p. 128, and Lat. *fītum* Gr. *φῖτο*). For 3<sup>rd</sup> pl. was used *bq* (beside *bišę*), also injunctive in origin, Class II *B* (§ 523 p. 87).

Remark. The view of these forms set forth by Wiedemann, Lit. Prät. 136 ff., is untenable. O.C.Sl. *bi-mü* cannot be separated from Lith. *-bi-me*; and to regard this Lith. form as an optative with orig. *-i-* is

1) The 2<sup>nd</sup> sing. *-bei* admits of several explanations. It probably is akin to O.C.Sl. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *bě* Gr. *ἰφύη-ς ἰφύη* (§ 587 pp. 127 ff.).

2) In the same way were used the aorist forms *bychü* *by by* *bychomü* etc.

Brugmann, Elements. IV.

opposed to phonetic law as completely as the assumption that Lith. *dū sim(e)* 'dabimus' is optative of the *s-* aorist (cp. § 761).

With the remaining Balto-Slavonic verbs of this class we find regularly an infinitive stem in *-ē*, as Lith. *smirdē-ti* O.C.Sl. *smrīdē-ti* beside *smīrdžiu smrīždq* (cp. O.C.Sl. *bē bēchū bēachū* beside *bi-mū*, like *smrīdē smrīdēchū smrīdēachū* beside *smrīdi-mū*). This, as we saw in § 708 pp. 238 ff., has a parallel in Greek; for instance, *μαίνομαι: ξιάνην μεμαρηνός μεμαρηναι μαρίσουαι* = O.C.Sl. *mānjā: mīnē mīnēvū mīnēchū* (Lith. *mīnē minēsiu*). In Italic and Germanic, there are only some parallel *īo*-presents, as Lat. *nōlī* O.H.G. *willu* Goth. *viljan*: O.C.Sl. *veljā*; O.Sax. pl. *libbiad* partic. *libbiandi*: O.C.Sl. *-līpljā*. Here we usually find presents in *ē*, as Lat. *valeō*: Lith. *galū*, O.H.G. *lebēm*: O.C.Sl. *-līpljā*.

Lith. *tylū* (i. e. *\*tyl-īū*) *tylē-ti* 'to be still' (long *ī*-sound not original): O.H.G. *dolē-m* 'I suffer, endure', ✓ *tel-* 'carry, bear'. O.C.Sl. *mānjā mīnē-ti* 'to think': Skr. *mān-ya-tē*, Gr. *μαίνομαι*, O.Ir. *do muiniur* Goth. *muna* 'I bethink me, think of, wish' 2<sup>nd</sup> sing. *munáis*, see § 707 p. 235. Lith. *girdžiu girdē-ti* 'I apprehend, hear': Gr. *φράζω*, see § 707 p. 236. O.C.Sl. *drīžā drīža-ti* 'contain, possess': Skr. *dṛh-ya-ti* 'makes fast'. O.C.Sl. *-līpljā -līpē-ti* 'to cling to': Skr. pass. *lip-ya-tē* 'is smeared or anointed', O.Sax. *libbiu* O.H.G. *lebē-m* 'I live' (the O.Icel. *lifa* 'to be over, remain, live' helps to make clear how one meaning came out of the other). Lith. *pa-výdžiu -vydēti* 'invidere' O.C.Sl. *viždq vidē-ti* 'to see': Skr. *vid-yā-tē* 'is known, recognised, found', Lat. *videō*, Goth. *vita* 'to look at a thing, observe' 2<sup>nd</sup> sing. *vitái-s*. O.C.Sl. *būžda būdē-ti* 'to wake, watch': Skr. *būdḥ-ya-tē* 'awakes, perceives' pass. *budh-yā-tē*. O.C.Sl. *rūždq rūdē-ti* 'to blush': Lat. *rubeō*. O.C.Sl. *kypļjā kypē-ti* 'to boil, seethe': Skr. *kup-ya-ti*, Lat. *cupiō*, see § 707 p. 236. O.C.Sl. *stojā stoja-ti* 'to stand': Skr. pass. *sthī-ya-tē* instead of *\*stha-ya-tē*, O.H.G. 2<sup>nd</sup> sing. *stēs* for *\*sta-īi-zi*, see § 706 p. 234, § 708 p. 240.

O.C.Sl. *govļjā govē-ti* 'venerari, vereri', pres. also *govēja:*

Lat. *faveō*. Lith. *galù* (i. e. *\*gal-ju*) *galē-ti* 'to be able': Lat. *valeō* (otherwise Bezzenberger, in his Beitr. xvi 256).

O.C.Sl. *veljā velē-ti* 'to command': Lat. *nōlī*, O.H.G. *willu* 'I wish' Goth. *viljan* 'to wish', see § 505 p. 69, § 716 p. 249. Lith. *aviù avē-ti* 'to be shod': Umbr. *an-ovihimu*  $\sqrt{em-}$ , see § 716 p. 249.

Lastly it should be mentioned that in Balto-Slavonic the non-present *ē*-forms are found along with other than *jo*-present stems: e. g. Lith. *menù minēti* 'to think of', *gēlbu gēlbēti* 'to help', *gedù gedēti* 'to lament, mourn', *bundù budēti* 'to watch', *sēdmi sēdēti* 'to sit', O.C.Sl. part. pres. *gorat-* beside *gorēt-* 'burning' from inf. *gorēti*, partic. *vidomŭ* 'ὁρώμενος' beside *vidimŭ* from inf. *vidēti*. The same thing is seen in Greek, as ἐθέλω : ἐθέλησω, νέμω : νενέμημαι etc. (Curt. Verb. I<sup>2</sup> 384 ff.), and doubtless in Germanic, as Goth. *haba habam haband* may well belong to Class II (§ 708 pp. 239 f.).

### Class XXVII.

Reduplicated Root + *-jo-* *-iṣjo-* forming the Present Stem.

§ 728. (A). Pr. Idg. There was a *jo*-Class with complete reduplication, closely connected with Classes VII and VIII. As regards the type of the reduplicating syllable see §§ 465—467, 470, and 474. Compare, for instance, Skr. *dē-diṣ-yá-tē* beside *dē-diṣ-ṭe*, *varī-vṛt-yá-tē* beside *vārī-vart-ti*. Probably the mode of conjugation with *-jo-* was occasioned by that of Class VII; cp. § 703 pp. 231 f.

Skr. *vē-vij-yá-tē* 'makes for, rushes against anything' and Gr. ἄρτω Hom. ἄισσω 'I rush towards' for *\*Fal-Fix-ḡu*, apparently from  $\sqrt{uaxig-}$  *uaxig-* (§ 465 p. 12).

§ 729. Aryan. Only a few examples in Vedic, but later this type of Intensive spread very widely. *car-cūr-yá-tē* from *car-* 'to move'. *nan-nam-yá-tē* from *nam-* 'to bow, incline'.

*nē-nī-yá-tē* from *nī-* 'to lead'. *cō-ṣkū-yá-tē* from *sku-* 'to cover'. *mar-mṛj-yá-tē* *marī-mṛj-ya-tē* from *marj-* 'to sweep off, wipe away'. *kani-krad-yá-tē* from *krand-* 'to roar'. *vē-viṣ-ya-tē* from *viṣ-* 'to be active'. *nō-nud-ya-tē* from *nud-* 'to knock away'. *cā-kaś-ya-tē* from *kaś-* 'to appear'. In Avestic there seems to be only one example, *rā-riš-yē-iti* 'hurts, wounds', cp. Skr. *riṣ-ya-ti* 'injures'.

§ 730. Greek. *ῥιττω* for *\*φα-φικ-χω*; see § 728 p. 259. *γαρ-γαίρω* (for *\*-γαρ-χω*) 'I swarm'; *μαρ-μαίρω* 'I shimmer, glitter'. With *πορ-φύρω* 'I well up, heave, change colour' *μορ-μόρω* 'I roar, murmur' cp. *πύρω* § 713 p. 247. *παμ-φαίνω* (✓ *bha-*) shows a nasal suffix like *φαίνω* for *\*φα-ν-χω*; parallel Hom. *παμφανόωσα*. On *παι-φάσσω*, *παι-πάλλω*, *ποι-φύσσω* and the like, see § 465 Rem. p. 12.

§ 731. Italic. Lat. *tin-tinnio* (t) beside *tinniō*. *gin-griō* (t) beside *garriō* (cp. § 466 p. 13).

Of Keltic forms may be placed here the isolated Mid.Ir. *der-drethar* 'sounds, cries out' with the *s*-preterite *derdrestar* (§ 465 p. 12).

§ 732. Slavonic. O.C.Sl. *glagoljā* 'I speak' for *\*gol-gol-jā*, 2<sup>nd</sup> sing. *-je-ši* etc. (*glagola-ti*), with the same reduplication as *glagolū* 'word'. *mŕŭ-mŕ-jā* 'I gnaw', 2<sup>nd</sup> sing. *-je-ši* etc. (*mŕŭ-mŕa-ti*).

§ 733. (B) It is rare in the Idg. languages to find the *io*-suffix with presents reduplicated in any other way; and in no language has this class become a large one. All the examples appear to be new formations. Skr. pass. *dad-yá-tē* 'datur' (beside *dā-yá-tē*) by analogy of *dāda-mi* *dad-mās*, cp. partic. *dat-tu-s*, § 541 p. 102. Skr. pass. *nind-ya-tē* 'is scolded or blamed', if *nindu-ti* is to be analysed *\*ni-nd-e-ti*, see § 550 p. 106. Avest. *yaēš-yē-iti* 'seethes, boils', which looks like a contamination of Skr. *yēṣa-ti* i. e. *\*ṣa-ṣṣ-ati* (§ 562 p. 110) and *yás-ya-ti*. Gr. Att. *δεῖδιτρομαι* Hom. *δεῖδιόσομαι* i. e. *δεῖδιόσομαι* 'I frighten, or am frightened' for *\*δε-δφικ-χο-μαι*, beside

*ῥί-δοικα* (cp. Johansson, Beitr. gr. Spr., 80 f.). *νίσομαι* 'I go back, return' for \**νι-νσ-ιο-μαι* from  $\sqrt{\text{nes-}}$  seems to presuppose \**ni-nes-mi*, which is represented by the Skr. 3<sup>rd</sup> pl. mid. *nīṣ-atē* (§ 539 p. 99). *λilαίομαι* 'I desire, long for' for \**λι-λασ-ιο-μαι*, cp. Skr. *laṣati* for \**la-lṣa-ti* § 562 p. 110. *τιταίρω* 'I put to, yoke' ground-form \**ti-ty-īō*, cp. Lat. *tendō*, if this is for \**te-tn-ō* (§ 564 p. 111). O.Ir. *-airissiur* 'I remain standing' for \*(*pari*)-*sistiō(r)* (I § 109 e p. 103, § 516 p. 377), beside Gr. *ἴστημι* Skr. *tī-ṣṭh-a-ti* Lat. *si-st-ō* § 539 p. 100. O.C.Sl. *dežda* 'I lay' for \**de-d-īa* 2<sup>nd</sup> sing. *deždeši* etc. (inf. *dě-ti*) beside Lith. *dē(d)-mi* *ded-ū* § 546 pp. 103 f.

A peculiar reduplication is shown by certain Greek verbs. *πα-φλάζω* 'I bubble' beside *φλέδων* 'gossip', *κα-χλάζω* 'I gurgle', *βα-βράζω* 'I chirp'. They are Intensives or Iteratives to the verbs named in § 730.

### Class XXVIII.

Root + *-ā-*, *-ē-*, *-ō-*, + *-īō-* forming the  
Present Stem.

§ 734. The forms now to be noticed are closely connected with Classes X and XI (§§ 578 ff.), under which heads much has already been said of the *īō*-stems.

I believe that the original accentuation of this class is preserved in those Sanskrit verbs which have dissyllabic stems before *-ya-*, such as *grbhā-yā-ti*, and by Sanskrit passives like *trā-yā-tē* (§ 703 p. 232). *trā-ya-tē* has followed the lead of *pāc-ya-tē* etc., and *trā-yā-tē* : *trā-ya-tē* = *ric-yā-tē* : *ric-ya-tē* (§ 710 p. 245).

### § 735. Unreduplicated Forms.

Pr. Idg. \**trā-īō-*: Skr. *trā-ya-tē* 'protects, saves' pass. *trā-yā-tē*, Lat. *in-trō* for \**-trā-īō*, with which is doubtless connected O.C.Sl. *tra-jā* 'I last, endure' (inf. *traja-ti*). Skr. *sn-ā-ya-tē* 'bathes himself', Lat. *nō* for \**sn-ā-īō*. Lat. *hiō* for



\**hiā-īō*, Lith. *žiō-ju* 'I open my mouth' (inf. *žiō-ti*), cp. Lat. *hī-scō* O.H.G. *gi-nō-m* *gei-nō-m* 'I gape'. Compare § 579. Lat. *arō* for \**arā-īō*, Gr. *ἀράω* 'I plough' pr. Gr. \**ἀρᾱ-(ι)ω* (§ 583 p. 124, § 775). With these primary verbs should be classed several very wide-spread onomatopoetic or imitative verbs, as Gr. *ὠάω -ō* 'I roar' Lith. *ulō-ju* 'I call, shout for joy, cheer' (also reduplicated *ululō-ju* = Lat. *ululō*): Gr. *ὀγκάζομαι -ōμαι* 'I bray, hee-haw' Lat. *uncō*; Gr. *μυγάζομαι -ōμαι* 'mugio' Umbr. *mugatu* 'mugito, muttito'.

\**sn-ē-īo-*: Gr. *νῆ* 'spins' for \**σνῆ-κει* (Mekler, Beitr. zur Bild. des gr. Verb., p. 18), Lat. *neō*, O.H.G. *nāu* 'I sew'. \**gn-ē-īo-* \**gn-ō-īo-*: Skr. pass. *jñayā-tē* 'noscitur' (-ē- or -ō-<sup>p</sup>), O.H.G. *knāu* 'I know' (-ē-, but cp. p. 128 footnote), O.C.Sl. *zna-jā* 'I know' (-ō-, inf. *zna-ti*). Lat. *fl-eō*, O.H.G. *blāu* 'I blow' pr. Germ. \**bl-ē-īō*, perhaps too O.C.Sl. *bl-ē-jā* 'I bleat' (inf. *blēja-ti*). Skr. *v-ā-ya-ti* 'blows', Goth. *v-aia* O.H.G. *w-au* 'I blow', O.C.Sl. *v-ē-jā* 'I blow' (inf. *vēja-ti*). Lat. *taceō* for \**tac-ē-īō*, Goth. *pahdīp* for \**pahē-īi-đi*. Lat. *fav-eō*, O.C.Sl. *gov-ēja* 'veneror, vereor' (§ 590 p. 132). Compare §§ 587, 708.

§ 736. Aryan. Skr. *tr-ā-ya-tē* 'protects' pass. *trā-yā-tē*, Avest. *pra-ye-iti* 'protects': Lat. *-trō*, see § 735. Skr. *śr-ā-ya-ti* 'boils, cooks', cp. Gr. *σί-ροῦ-ται*. Pass. *mn-ā-ya-tē* 'commemoratur', cp. Gr. Dor. *μέ-μνᾱ-ται*. Pass. *ml-ā-ya-ti* 'grows soft', cp. Gr. Dor. *βλ-ᾱ-ξ*. *py-ā-ya-tē* 'swells' beside *páy-a-tē* *pī-páy-a* *pī-py-ā-ná-s*. *y-ā-ya-tē* pass. 'itur', cp. Goth. *jē-r* and Lith. *jó-ju*. *khy-ā-ya-tē* pass. 'is seen', cp. aor. *á-khy-a-t*. *śy-ā-ya-ti* 'curdles, congeals', cp. part. *śr-tá-s*. Compare §§ 580 and 588.

Also verbs in *-ā-yā-ti* in which the root formed a complete syllable. The speaker imagined these to be parallel with *pr̥tana-yā-ti* *mana-yā-ti* and the like (§§ 617, 769) — there really was no difference in character, if we are right in identifying the verb-suffix *-ā-* with the feminine suffix — and therefore kept the old accent without changing it as in *trāya-tē*. Skr. *gr̥bhā-yā-ti* 'seizes' O.Pers. *a-garbāya-m*, Skr. *damā-yā-ti* 'over-

powers' (cp. Lat. *domāre*), Skr. *tudā-yá-ti* 'pushes', *pruṣā-yá-ti* 'spurts out'.

§ 737. Greek. \**δρᾶ-λω* 'I do' *δοῶ δρᾷ*, beside Lith. *darau* 'I do', cp. *δρ-αίνω* § 621 p. 159. \**πα-λω* 'I bring into effect, carry out' for \**ῥα-ῖδ* (II § 117 p. 371): El. imper. *ἐπ-ει-πήτω*, cp. Skr. *śv-ā-* in *sq-śvāyín-* 'swelling' etc. *ἰάομαι ἰῶμαι* 'I heal' for \**is-ā-ῖδ-*, is related to *ἰαίνω* (§ 743) as *δοῶ* to *δραίνω*. *ἀράω* 'I plough', *ἐλάω*, *ὀγκάζομαι*, *μυκάζομαι*, see § 735 p. 262.

\**χρ-η-λω* 'I give an oracle' *χρῶ χρῆ*, partic. *χρηών* Od. 8. 79. Dor. \**φλ-η-λω* 'I wish, desire' (beside Lat. *vel-le*) *λῶ λῆ* El. opt. *ληοίταν*; the Gort. *ληῖω* (e. g. 3<sup>rd</sup> pl. conj. *ληῖοντι*) for \**ληέω* is formed like *χρηέομαι*: was this derived from *τὸ χρῆθος*, or was it a formation like Skr. causal *pyā-y-āya-ti*? (cp. § 801). \**κν-η-λω* 'I rub, scratch' (cp. *κν-ύω*) *κνῶ κνῆ*. \**ζη-λω* 'I live' for \**gi-ē-ῖδ* (✓ *geῖ-*) *ζῶ ζῆ*; the forms *ἔζην ζῆθι* are later and follow Class X (cp. § 496 p. 56); with *-δ-*, *ζώ-ω* Gort. *δαίω* (*δαίωσι δάωντι* etc.), like O.C.Sl. *znaja* beside O.H.G. *knāu* (§ 735). \**ψ-η-λω* 'I grind or crush to pieces' (Skr. *ps-ā-ti* § 587 p. 128) *ψῶ ψῆ*.

§ 738. Italic. In Latin only the 1<sup>st</sup> sing. pres. has the *ῖδ*-suffix, the other persons being formed after Class X. This was perhaps due in part to the early loss of the personal ending *-mi* in Italic, whence it became possible for *volō* to take its place in the same scheme as *vult*, *eō* beside *it*.

*-ā-ῖδ*. *in-trō nō hiō* see §§ 735, 736. *fl-ō*, pl. *fl-ā-mus*. Also *juv-ō lav-ō* and suchlike. See § 583 p. 124.

*-ē-ῖδ*. *pleō neō fleō vieō*, also *taceō scateō videō sileō faveō valeō habeō* etc. See §§ 587, 590, 708.

§ 739. Germanic. Monosyllabic stems in *-i-* and *-δ-* almost wholly gave up the unthematic inflexion, and took that with *-ῖδ-* (§ 592 p. 133). O.H.G. *nāu* 'I sew' *knāu* 'I know' Goth. *vaiā* O.H.G. *wāu* 'I blow', see § 735. O.H.G. *drāu* 'I turn, twist', \**tr-ē-* from ✓ *ter-*, cp. Gr. *τρ-ῆ-μα* 'hole' *τρίρ-ε-τρο-ν* 'borer'. There may be Idg. *-ō-ῖδ*

in O.H.G. *bluoīu bluoīcu* O.Sax. *blōiu* 'I bloom', cp. Lat. *fl-ō-s* (gen. *fl-ō-r-is*); it must remain uncertain whether we have *-ō-īō* or *-ā-īō* as the ending in O.H.G. *gluoīu gluoīcu* 'I glow' (✓ *ghel-*).

Dissyllabic stems in *-ē-* and *-ā-* have both non-thematic and *īo*-flexion.

Dissyllabic *ē*-stems in Gothic show *īo*-flexion in forms containing *ái*, such as *þaháis þaháiþ* (the 1<sup>st</sup> sing. is *þaha* 'I am silent') for *\*-ē-īi-zi -ē-īi-ði*: Lat. *taceō*. Compare also Goth. *vitáiþ* 'looks at, regards': Lat. *videō*, *siláiþ* 'is silent': Lat. *sileō*; *habáiþ* 'has': Lat. *habeō*. Compare § 592 p. 133, § 708 pp. 238 ff. On the spread of this *ē*-flexion to nasal present stems, see § 605 pp. 146 f., § 623 p. 160; on the formation of *ē*-verbs from nouns, § 781.3.

Dissyllabic *a*-stems were inflected just like the later stratum of *a*-denominatives (as Goth. *fairinōn* from *fuirina*). The *īo*-extension is clearly seen only in Anglo-Frisian, as A.S. 1<sup>st</sup> sing. *-ie* pl. *-iað* for pr. Germ. *-ō-īa-* see § 781.1. Examples of "primary" verbs are: Goth. *mitō* 'I mete, measure' O.H.G. *mezzōm* 'I moderate', Goth. *bi-láigō* 'I lick all over' (cp. Lith. *laižau* 'I lick' inf. *laižý-ti*), O.H.G. *fehōm* 'I adorn' O.H.G. *mahhōm* 'I make'. Compare § 579 p. 121, § 585 p. 126.

#### § 740. Balto-Slavonic.

*-ā-īo-* Lith. *žió-ju* O.C.Sl. *tra-ja* see § 735. Lith. *jó-ju* 'I ride' (*jó-ti*), see § 587 p. 128. Probably also Lith. *gró-ju* (*gró-ti*) O.C.Sl. *gra-ja* (*graja-ti*) 'I croak', Lith. *kló-ju* 'spread out' (*kló-ti*), and others. Some of the Lithuanian "Iteratives" are in place here, as *lindo-ju* beside *lindau* 'I put in' (*lindo-ti*), *rýmo-ju* beside *rýmau* 'I sit supported on something' (*rýmo-ti*), *svyró-yu* 'I move to and fro' (*svyró-ti*), etc. So in O.C.Sl., Iteratives such as *sūn-ēdaja* 'comedo' (*-ēda-ti*), *raz-vrīzaja* 'I open' (*-vrīza-ti*), *sū-biraja* 'I gather' (*-bira-ti*). Compare §§ 586, 783.

*-ē-īo-* O.C.Sl. *blē-ja vē-ja* see § 735. *grē-ja* 'I warm'

(*grēja-ti*). *gové-ja* 'veneror, vereor' (*gové-ti*): Lat. *faveō*, see § 735. Lithuanian "Diminutives" (Iteratives), as *byrė-ju* 'I scatter a little' or 'I am a little scattered' (*byrė-ti*), *kylė-ju* 'I lift a little' (*kylė-ti*), *lukė-ju* 'I wait a little' (*lukė-ti*). Compare §§ 593, 784.

-*ō-jo-* possibly in O.C.Sl. *zna-ja*, § 735, and perhaps in a few, none can say which, of O.C.Sl. verbs in -*a-ja* (Idg. -*ā*- and -*ō-* ran together in Slavonic).

#### § 741. Reduplicated Forms.

The Reduplicated forms with *a*-suffix mentioned in § 595 have some of them the *jo*-extension. Lat. 1<sup>st</sup> sing. *ululō*, Lith. *ululō-ju* 'I call, shout for joy' (cp. *ulō-ju* Gr. *ὕλαω* § 735 p. 262). Lat. 1<sup>st</sup> sing. *murmurō*, cp. O.H.G. *murmurōm murmulōm*. Lat. 1<sup>st</sup> sing. *tintinnō tintinō* beside *tintinn-iō* (Class XXVII).

A later Greek form is *κίγ-κρά̃* · *κίρα̃* (Hesych.) beside *κίγ-κρά̃-μι*, see §, 594 p. 135.

O.H.G. *rērēm* A.S. *rārie*, connected with Lith. *rė-ju rė-ti* 'I cry out loud', comes from a pr. Germ. *\*rai-rē-jo*, see § 708 p. 240. *ē* in *rē-* was a suffix, as may be seen from Lett. *rā-ju* 'I scold' and other words (Per Persson, Wurzelerw. pp. 91, 196).

### Class XXIX.

Nasal Stems + -*jo-* for the Present Stem.

§ 742. The formations here to be treated are connected with Classes XII to XVIII, and fall into three groups: those connected with (A) Classes XII to XIV, (B) Classes XV and XVI, and (C) Classes XVII and XVIII.

§ 743. (A) -*n-jo-* is fairly common only in Greek. Lesb. *κλίνω* Hom. Att. *κλίνω* 'I bend' for *\*κλιν-χ-ω*, beside O.Sax. *hlinō-n* etc. *κρίνω* 'I separate, choose out, distinguish' for *\*κρι-ν-ω*. *στίνομαι* 'I plunder' for *\*σι-ν-χσ-μαι*. *ὀτρύνω*

'I urge on' for \**ó-τρν-ν-λω*. *φαίνω* 'I show, make visible' for \**γ-α-ν-λω*, beside Armen. *ba-na-m* 'I open' (\**bha-na-mi*), √ *bha-*. *χαίνω* 'I gape' for \**χ-α-ν-λω*. See § 601 p. 144, § 611 p. 150. Lat. *li-n-iō* (*li-n-i-mus*) beside *li-nō*, Skr. *vi-līnāmi* 'I dissolve, disintegrate' (intr.), see § 598 p. 142. O.Ir. *ara-chri-nim* 'difficiscor, I go to pieces' beside Skr. *śṛ-ṇá-ti*, see § 604 p. 146. O.H.G. *spennu* (= Goth. \**spanja*) 'I attract, charm' beside *spa-nu* i. e. \**spə-nō* √ *spē-*, see § 614 p. 152.

-*γ-ιο-* was used even in pr. Idg., and is especially common in Sanskrit and Greek. Idg. \**is-γ-iō*: Skr. *iṣ-an-yá-ti* 'sets in motion, excites' Gr. *ιαίνω* 'I quicken' beside Skr. *iṣ-ana-t*, Skr. *tur-an-yá-ti* 'hastens', *bhur-an-yá-ti* 'is brisk'. Gr. *αΐαίνω* 'I make dry' beside Lith. *saũs-inu*, *όλισθαίνω* 'I slip' beside *όλισθαίρω*, *τερσ-αίνω* 'I make dry, κναινω' *εγκνος ὄν*, *ἐκ-γλ-αίνω* 'I bubble or gush out', *δο-αίνω* 'I do', *κρ-αίνω* 'I complete', *ῥ-αίνω* 'I scratch' and many more; -*αινω* became a very productive suffix. Armen. -*anim*, as *mer-ani-m* 'I die', like Gr. *μαρ-αίνω*. O.H.G. *gi-wahannen* 'to recount' (pret. *gi-wuog*), A.S. *wæcnan* 'awake' (pret. *wōc*). See §§ 618—621, § 623 pp. 156 ff., § 711 p. 246.

§ 744. (B) Present Stems with "Nasal Infix" become very common in Greek and Baltic. In explanation of the examples given below see §§ 628, 629, 631, 632, 634—637, pp. 164 ff.

Gr. *πίσσω* *πρίττω* 'I bray, pound' instead of older \**πτινσ-λω*, Lat. *pīns-iō* (*pīns-i-mus*), beside Skr. *pináṣ-ti á-piṣ-a-t*.

Skr. pass. *vand-ya-tē* beside *vanda-tē* 'praises, honours' compare *váda-ti ud-yá-tē*; not a very old form.

Gr. *λίζουσι* *παίζουσιν* probably for \**λινδ-λω*; *σάμιπ-τω* 'I throw violently at' perhaps for \**σκιμπ-λω*, beside Skr. *kṣip-*. *λύζω* 'I sob' for \**λγγ-λω*, cp. *λύγξ* *λυγγάνομαι* *λυγκαίνω*, √ *s'á-ṛgk-siá-ṛg-*. *πλάζω* 'I strike, knock away' for \**πλαγγ-λω*. *κλάζω* 'I shout, cry' for \**κλαγγ-λω*.

Lat. *vinc-iō* (i) beside Skr. *vi-vyak-ti* 'embraces, surrounds' 3<sup>rd</sup> dual *vi-vik-tás*. *sunc-iō* (i) beside *sacer*.

Lett. *mī/chu* 'mingo' for \**minz-iu*. Lith. *jūng-iu* 'I yoke, put to'. *skūnd-žiū* 'I weep, bewail myself' beside *pra-skundū* (pret. *-skudaū*) 'I begin to smart'. *sunk-iū* 'I strain, filter, let something run through' beside Lett. *swak-s* 'resin'. Lett. *kamp-ju* 'I grasp, grip' beside Lat. *cap-iō*. Lith. *lenk-iū* 'I bend' ✓ *leg-*. *stėng-iu* 'I put my strength to' beside Gr. *στίβω*. O.C.Sl. *žęžďa* 'I covet' (inf. *žę-da-ti*) beside Lith. *geid-žiū*. *glęžďa* 'I look' (*ględē-ti*) beside O.H.G. *glīzu*. *ob-ręštą* 'I find' (*-rešti*).

§ 745. (C) Rare forms, undoubtedly late, are all that meet us in this section. O.C.Sl. *mi-nu-ją* 'I go over' beside *mi-na*, see § 649 p. 185.

### Class XXX.

Root + *s*-Suffix + *-iō-* (the *-s-iō-* Future).

§ 746. Two groups of forms, with Present and Future meaning respectively.

(A) With Present meaning: fairly common nowhere but in Sanskrit, and for the most part clearly later extensions of the *s*-Present. As regards the examples here following, see §§ 656 and 657, pp. 190 ff.

Skr. *tras-ya-ti* beside *tr-āsa-ti* 'trembles', Lith. *tres-iū* 'I am in rut' used of bitches (inf. *trėsti*). Skr. *pluś-ya-tē* pass. of *plō-śa-ti* 'burns, siuges', Lat. *prū-r-iō* (*prūrīre*). Avest. *uxš-yē-iti* beside *vax-ša-iti* 'makes grow', Goth. *vahs-ja* 'I grow' (pret. *vōhs*).

Skr. *śliś-ya-ti* 'hangs on to, sticks to' pass. *śliś-yá-tē*, Avest. *sraeš-yē-iti* (same meaning) beside Skr. *śrē-śa-ti á-śli-śa-t*. Skr. *iś-ya-ti* Avest. *iš-yē-iti* 'sets in motion' beside Skr. *i-śa-tē*. Skr. *tviś-ya-ti* 'is excited, distracted' beside 3<sup>rd</sup> pl. *á-tvi-ś-ur*. *ghuś-ya-ti* 'cries out, announces loudly' pass. *ghuś-yá-tē* beside *ghō-śa-ti*. Pass. *rakś-ya-tē* beside *rák-śa-ti* 'guards, saves'. Pass. *gras-ya-tē* beside *gr-asa-ti* 'devours'.

Lith. *tęs-iū* 'I stretch' beside Skr. *ta-sa-ti* etc.

§ 747. (B) With Future Meaning.<sup>1)</sup> Even as early as the proethnic period *-s-īo-* (or *-as-īo-*) must have already become a simple suffix for expressing the future. This group of forms grew out of Classes XIX and XX, particularly forms with the strong-grade of root syllable; compare Skr. *tqsyá-tē* and *tq-sa-ti* (Goth. *-þin-si-þ*) *á-tq-s-mahi*, *śrōšyá-ti* (Gr. *κλε-σόμεθα* in Hesychius) and *śrō-ša-māna-s*, *vakšyá-ti* and Avest. *vax-ša-itē* (✓ *ueq-* 'speak'), *sakšya-ti* (Gr. *ἔξω*) and *sik-ša-nt-✓segh-* (§§ 657 ff.); very rarely from forms with root-syllables in a weak grade, as Avest. *būšye-iti* (pr. Ar. doubtless *\*bhúšja-ti*, cp. Skr. *sū-šya-nt-* § 748) Lith. *bú-siu* (Gr. *φύσω*) beside Skr. *bhū-ša-ti* (§ 659 p. 194). Sanskrit forms with *-iṣya-* were derived from the *iṣ-* aorist, compare *vēdišyá-ti* with the aorist stem *vēdiṣ-* in *á-vēdiṣ-am*.

The oldest meaning of the *siō-* future was probably that of *Wish*, which weakened to a mere future. Compare the desiderative meaning of Skr. forms like *tī-stīr-ša-tē* (§ 667 pp. 198 ff.), and the future meaning of such others as O.Ir. *no-gigius* § 668 p. 200.

1) Hadley, On the formation of Indo-European Futures, 1859, in his *Essays*, pp. 184 ff. [G. Meyer]. Th. Benfey, Über die Entstehung und die Formen des idg. Optativ (Potential) sowie über das Futurum auf sanskritisch *syāmi* u. s. w., Abhandl. d. Gött. Ges. d. Wissensch., xvi 135 ff. L. Hirzel, Zum Futurum im Idg., Kuhn's Zeitschr. xiii 215 ff. J. Schmidt, La formation des futurs dans les langues indo-germ., Revue de linguistique iii 365 ff. — Bezenberger, Conditionalformen im Avesta, in his Beitr. ii 160 f. — A. Franke, Das Futurum im Griech., ein sprachgeschichtlicher Versuch, Gött. 1861. T. H. Key, On the Formation of Greek Futures and First Aorists, Trans. Phil. Soc. 1861, pp. 1 ff. Leskien, Die Formen des Futurums und zusammengesetzten Aorists mit *σν* in den homer. Gedichten, Curtius' Stud. ii 65 ff. P. Cauer, Die dor. Futur- und Aoristbildungen der abgeleiteten Verba auf *-ζω*, Sprachwiss. Abhandl. aus G. Curtius' Gramm. Gesellsch. pp. 126 ff. J. Wackernagel Griech. *κτεροῦν*, Idg. Forsch. II 151 ff. (In the explanation of *κτεροῦν* and the similar Homeric future forms I concur with Wackernagel, see § 757 Rem. p. 277). Janson, De Graeci sermonis paulopost-futuri forma atque usu, Rastenburg 1844. — J. Schmidt, Über das Futurum im Aksl., Kuhn-Schleicher's Beitr. iv 239 ff.

Only in Aryan and in Balto-Slavonic is the *sjo*-future certain. In such forms as Gr. *δειξω* it cannot be proved that after *s* an *i* has been lost, and they may be regarded as conjunctives of the *s*-aorist, *δειξω* fut. being the same as *δειξω* conj. of *ἔδειξα*, and as Lat. *dixō* beside opt. *dixim*. Special attention should be given to Epic forms like imper. *οἴσσε* *οἴσσετε* beside fut. *οἴσω*, imper. *ὄψασθε* beside fut. *ὄψομαι*, which make strongly for this view (see § 833). On the other hand, I know of nothing to prevent fut. *δειξω* being derived from \**δεικ-σῴω* (Skr. *dekṣyāmi*). The same doubt is suggested by futures of the type of *τενέω* *τενῶ* (cp. Skr. *taniṣyāmi*), which as conj. aor. may be compared with *εἰδέω* *εἰδῶ* from *ἰδέω* (§ 836).<sup>1</sup> We may conjecture that in Greek the Idg. forms with *-sjo-* and the conj. aorist had run together; as, in Lithuanian, beside *dū'siame* *dū'sime* *dū'siate* *dū'site*, the future answering to Skr. *dāsyāmas* *dāsyātha*, we find used in the same way the Aorist Injunctive forms *dū'sme* *dū'ste*. Compare the Author, *M. U.* III 58 ff.; G. Meyer, *Gr. Gr.*<sup>2</sup> 473 f.; Johansson, *Deriv. Verb. Contr.* 203 ff.

Spite of this uncertainty, the Greek future may be treated here along with the Aryan and Balto-Slavonic *sjo*-future.

Remark. I know of no evidence to support Ascoli's assumption (*Sprachw. Briefe*, 65 ff.), that *-σεω* in the Doric future comes regularly from \**-σῴω* = Skr. *-syāmi* Lith. *-siu*.

§ 748. Pr. Idg. We have two endings to distinguish, *-sjo-* and *-esjo-* (*-esjo-*).

(A) *-sjo-*. The regular form of the root, as has been said in the preceding section, was strong grade (with *e* in the *e*-series). Thus the matter remained in Aryan; cp. *dekṣya-ti* beside pres. *diśá-ti* *diś-ya-ti*. Thus it often is in Lithuanian, as *reñ-siu* from *rem-*, *vėrsiu* from *uert-*. But in Lithuanian the form fell under the influence of the infinitive

1) It is striking that Homer uses no such form as *τενέω* *ἱλάω* parallel to *τελέω* for \**τελεσ-ῴω*, *ἡλαιομαι* for \**ἡλασ-ῴω-μαι*.



stem, and we have *lksiu* following *lkti*, instead of \**leiksiu* (pres. *lěkmī*, *lěkū*), and beside *reñ-siu* (*reñ-ti*) a variant *rim-siu*, inf. *rim-ti* (pres. *rimstū*), beside *veřsiu* (*veřsti*) a variant *viřsiu*, inf. *viřsti* (pres. *virstū*). In Greek, the vocalism of the future always agrees with the *s*-aorist, and this was mostly regulated by the present: *τίρω* like *ἔτερω* from *τέρω*, *γράφω* like *ἐγραψα* from *γράφω*, *γλύφω* like *ἐγλυψα* from *γλύφω*, *ὁμολογῶ* like *ὁμολογῆα* from *ὁμολογῶ-μι*. Exceptions: *τείσω* like *ἔτεισα*, but pres. *τίνω* (for \**τι-νῶ*); *μειζῶ* like *ἔμειξα*, but pres. *μίζ-νῶ-μι*.

✓ *rem-* 'rest': Skr. *ra-sya-tē* 'he will rest', Lith. *reñ-siu* 'I will support' (*reñ-ti*) *rim-siu* 'I will grow calm (in mind)' (*rim-ti*). ✓ *men-* 'think': Skr. *ma-sya-tē*, Lith. *mī-siu* (*mī-ti*), pres. *men-ū*. ✓ *qeī-* 'pay a penalty' etc.: Skr. *cē-śyá-ti* Gr. *τεί-σω* (*τεῖσαι*, pres. *τίνω*). ✓ *pleu-* 'swim, rinse, wash': Skr. *plō-śya-ti*, Gr. *πλεν-σο-μαι* (*πλῖσσαι*), Lith. *pláu-siu* (*pláu-ti*). ✓ *uert-* 'vertère': Skr. *vart-syá-ti*, Lith. *veřsiu* 'I shall turn' (*veřsti*) *viřsiu* 'I shall fall down' (*viřsti*). ✓ *uerg-* 'to work, be active': Avest. part. mid. *var\*śya-mna-*, Gr. *ἐρξω* (*ἐρξαι*). ✓ *serp-* 'crawl': Skr. *srap-sya-ti* *sarp-sya-ti* Gr. *ἐρη/ω* (*ἐρψαι*). ✓ *terp-* 'give joy': Skr. *trap-sya-ti* *tarp-sya-ti* (the latter in the Grammarians), Gr. *τέρω* (*τέρψαι*). ✓ *derk-* 'see': Skr. *drak-śyá-ti*, Gr. *δέρξομαι* (*ἰδερξάμην*). ✓ *qert-* 'cut, strike sharply': Skr. *kart-sya-ti* (instead of \**cart-*, cp. *karta-ti* § 522 p. 85), Lith. *kiřsiu* (*kiřsti*, pres. *kertū*). ✓ *leiq-* 'leave': Skr. *rēk-śya-tē*, Gr. *λείπω* (*λείπειν*), Lith. *lėk-siu* (*lėk-ti*, pres. *lėkū*). ✓ *ueid-* 'know, see': Skr. *vēt-sya-ti*, Gr. *εἶσομαι* (*εἰσανθαι*), Lith. *isz-výsiu* (*-výsti*). ✓ *deik-* 'show': Skr. *dēk-śya-ti*, Gr. *δείξω* (*δείξειν*). ✓ *bheydh-* 'awake, observe': Skr. *bhōt-sya-ti*, Gr. *πενύσομαι*, Lith. *būsiu* (*būsti*). ✓ *jeug-* 'iungere': Skr. *yōk-śya-ti*, Gr. *ζεύξω* (*ζεύξειν*), Lith. *jūnk-siu* like *jūnk-ti* following the present *jūngiu*. ✓ *peq-* 'coquere': Skr. *pak-śya-ti*, Gr. *πέπρω*. ✓ *dhegh-* 'burn': Skr. *dhak-śyá-ti*, Lith. *dėk-siu* (*dėk-ti*). ✓ *seq-* 'to be with, follow': Avest. *hax-šyē-iti*, Gr. *ἐπομαι*, Lith. *sėk-siu* (*sėk-ti*). ✓ *ed-* 'eat': Skr. *at-sya-ti*, Lith. *ėsiu* (*ėsti*). ✓ *says-* 'grow

dry': Skr. *śūkṣya-ti* (pres. *śúṣ-ya-ti*, see I § 557.4 p. 413), Lith. *saūsiu* (*saūs-ti*). √ *dhē-* 'place, lay': Skr. *dhā-sya-ti*, (Gr. *θή-σω*, Lith. *dē-siu* (*dē-ti*). √ *dō-* 'give': Skr. *dā-syá-ti*, (Gr. *δώ-σω*, Lith. *dū'-siu* (*dū'-ti*). √ *stā-* 'stand': Skr. *sthā-sya-ti*, Gr. *στά-σω* *στή-σω* (*στησαι*), Lith. *stó-siu* (*stó-ti*).

√ *bhē-* 'become': Avest. *ba-šyē-iti*, Gr. *φθ-σω* (*φῦσαι*), Lith. *bū-siu* O.C.Sl. *\*byša* (only in partic. *byšašteje byšešteje* 'το μέλλον'). Analogously, Skr. *sū-šya-nt-* beside *sō-šyá-ti* Avest. *hao-šyē-iti* from √ *se-* 'drive on, quicken, enliven' (cp. perf. Skr. *sasáva* like *babháva*). Compare § 747 pp. 268 f.

§ 749. (B) *-sṣio-* (*-esṣio-*). Skr. *-iṣya-* for *-sṣio-*. But Gr. *-eo-* comes from *-esṣio-*, unless (more probably) *-eo-* is for *-eso-*, and belongs to the conjunctive aorist (see § 747).<sup>1)</sup> The Sanskrit *-iṣya-* could be added to any root ending in a consonant; but Gr. *-eo-* was the regular future suffix only with roots in a liquid or a nasal. So we have Skr. *kṣariṣya-ti* 'it will flow, dissolve' (gramm.) answering to Greek *φθερῶ φθερῶ* 'I shall destroy' (Hom. *φθέρω*), Skr. *haniṣya-ti* 'he will strike, kill' to Gr. *θνήσκω -ῶ* 'I shall strike' (√ *ghen-*), Skr. *taniṣya-ti* (gramm.) 'he will stretch' to Gr. *τενέω -ῶ* 'I shall stretch', Skr. *kṣaniṣya-ti* 'he will hurt' (gramm.) to Gr. *κτενέω -ῶ* 'I shall kill'. A few Greek examples have *-ao-* with *-α-* = *-ə-*, as *κρεμάω -ῶ* 'I shall hang', cp. *κρέμαμαι*, *κρεμάσῃ* 'hanging basket'. Compare §§ 834 ff.

§ 750. Futures with *-sṣio-* have also been formed, from the proethnic period onwards, from stems consisting of √ + Determinative. We may mention:

(1) Stems with *-ā-* *-ē-*, or *-ō-* (Class X). *\*dr-ā-* 'run': Skr. *drā-sya-ti* (gramm.), Gr. *δρά-σο-μαι*. *\*mn-ā-* 'think of, remember': Skr. *mnā-sya-ti* (gramm.), Gr. *μνά-σω* *μνή-σω*. *\*gā-* 'go': Skr. *gā-sya-tē* (gramm.), Gr. *βᾶ-σο-μαι* *βή-σο-μαι*.

1) I now follow Bartholomae (Bezz. Beitr. xvii 109 ff.) in holding that *-ε-* which follows the root in *τενέω γενίτωρ* and like words is Idg. *-e-*, not *-ə-* (I § 110 pp. 103 ff.).

\**u-ē* 'blow': Skr. *vā-sya-ti*, Gr. ἀή-σο-μαι. \**gn-ō* 'noscere': Skr. *jñā-sya-ti*, Gr. γνῶ-σο-μαι. \**uid-ē* \**ueid-ē* 'see, know': Gr. Dor. ἰδῆ-σῶ Lith. *pa-vydēsiu* ('invidebo'), Gr. εἰδῆ-σῶ Lith. *veizdē-siu*. \**myn-ē* 'think': Gr. μανῆ-σο-μαι, Lith. *minē-siu*. Compare §§ 578 ff.

(2) Stems with *s*-elements (Class XIX and XX). *tr-es-* 'tremble': Skr. *tras-iṣyá-ti*, Gr. τρέσ(σ)ω, Lith. *trėsiu* for \**trės-siu* (pres. *tresiū*). Skr. *ṛṣ-iṣya-ti* beside *ṛ-ṣa-ti* 'seeks, desires'; *ślēkṣya-ti* beside *śli-ṣ-ya-ti* 'clings to' *á-śli-ṣa-ti*; *dakṣ-iṣya-tē* beside *dák-ṣa-ti* 'suits, accommodates'; *akṣ-iṣya-ti* beside *ak-ṣa-tē* 'reaches'. With Skr. *akṣiṣya-ti*, *bhāsiṣya-tē* (gramm.) compare the aorist forms *ákṣiṣur ábhāsiṣta* § 839. Gr. σείσω for \**σεισ-ω* (perf. σεί-σισται) from σείω (\**teṣi-s-*) 'I shake'; ξέσω from ξέω (\**qs-es-*) 'I scrape, smooth', Lith. *tėsiu* for \**tes-siu* beside *tē-s-iū* 'I stretch'. Compare §§ 655 ff.

(3) Stems with *dh-* and *d-*elements (Class XXV). Skr. *yōt-sya-ti* beside *yō-dha-ti* 'gets into motion', Lith. *jūsiu* beside *jundū* 'I begin to tremble', \**jeu-dh-*. Skr. *rāt-sya-ti* beside *rā-dh-ya-tē* 'carries out successfully'; *mrād-iṣya-ti* beside *vi-mrada-ti* 'softens' (*mr-ada-*). Gr. κλάσ(σ)ω from κλα-δ- 'break off'. But it is doubtful whether πλήσω 'I will fill' is \**πλήθ-σω* (cp. πλή-θω πέπλησται πληστέος) or πλή-σω (cp. πλήτο πέπληνται), whether ἐλεύσομαι 'I will come' is \**ἐλευθ-σομαι* (cp. ἤλυ-θον-ν ἐλευστέον-ν) or ἐλεύ-σομαι (cp. ἐλήλυ-τε προσ-ήλυτο-ς), whether πύσω 'I will make rot' is \**πύθ-σω* (cp. πύ-θω) or πύ-σω (cp. Lith. *pūv-ū*). There is the same doubt in Lith. futures like *plausiu* from *plau-d-žiū* 'I wash' (Idg. \**pleu-d-*), *sprāusiu* from *sprāu-d-žiū* 'I subdue' (Idg. \**spreu-d-*) *gėsiu* from *gė-du* 'I sing'. As we know not in what period of Lithuanian these verbal classes arose, we are not compelled to assume that *plausiu*, say, comes from a supposed form \**plautsiō*. The fact may be that *plau-siu* is really future to *plau-ju*; and then, on the analogy of *geidžiū geĩsiu geĩsti*, and others of this kind, *plausiu* was involuntarily associated with *plaudžiū plausti* as its future. Compare §§ 688 ff.

Forms with other present-signs sometimes make a *sjo*-future in different languages; as Skr. *indhiṣyati* Gr. *κλᾱγῶ* Lith. *jũnksiu*. See below, §§ 752 ff.

§ 751. The indicative with *-sjo-* seems to have had in proethnic speech a participle attached, but no more (Skr. *dā-syá-nt-*, Gr. *δῶ-ων*, Lith. dial. *dũ'sius* for *\*dũsiqs*, O.C.Sl. *byšašteje*). In Sanskrit grew up a conj. with Ar. *-a-*, and an augmented preterite; and Greek developed an opt. with *-i-*. See §§ 753, 759.

§ 752. Aryan. *-sjo-* and *-əsjo-*, but the latter is only to be found in Sanskrit (*-iṣya-*). There is no example of a future in Old Persian; this is probably due to chance. In Sanskrit and Avestic this future was a living and productive type. It is used, true enough, less often in Vedic than later; but then in Vedic injunctive and conjunctive forms were used with future meaning.

To the exx. cited in §§ 748—750 may be added: Skr. *vakṣyá-ti* Avest. *varṣye-itē* beside Avest. *vák-ti* 'speaks'; Skr. *janiṣyá-ti* Avest. partic. *zāhya-mna-* beside Skr. *ján-a-ti* 'begets'; Skr. *bhantsya-ti* *bandhiṣya-ti* beside *badh-nā-ti* 'binds'; *rōciṣya-tē* beside *rōc-a-tē* 'shines'.

In Sanskrit we meet with specimens of this future made from presents of any kind (cp. § 750). *mārkṣya-tē* (beside *mrakṣya-tē*) from *mārṣ-ṭi* Class I and *mārja-ti* Class II 'wipes' (cp. § 494 p. 55, § 514 p. 81). *sīdiṣya-ti* (beside *satsya-ti*) from *sīda-ti* Class IV 'sits' (§ 550 p. 106). *dadiṣya-tē* (beside *dā-syá-ti*) from *dā-dā-ti* Class V *dā-d-a-ti* Class VI 'gives'; *jahiṣya-ti* (beside *hā-sya-ti*) from *já-hā-ti* *ja-h-a-ti* 'leaves, deserts'. *jāgariṣyá-ti* from *jā-gar-ti* Class V 'wakes' (§ 560 pp. 109 f.). *indhiṣya-ti* from *inddhē* Class XV 'burns' ✓ *aīdh-*. *aśnuviṣya-ti* from *aś-nō-ti* Class XVII 'attains'; *jinvīṣya-ti* from *ji-nō-ti* Class XVII *ji-nva-ti* Class XVIII 'sets in motion, propels'. *titikṣiṣya-tē* from the desid. *tī-tik-ṣa-tē* Class XXI from *tij-* 'to be sharp'. *khyāyiṣya-tē* from pass. *khy-ā-ya-tē* Class XXVIII 'is seen'.

Rather commoner in the later language is the future of denominatives in *-yá-ti*, Class XXXI,<sup>f</sup> as *gōpāyīṣyá-ti* from *gōpā-yá-ti* 'guards' (*gōpā-s* 'guardian'); and of present stems in *-áya-ti* (Causatives), Class XXXII, such as *vyayīṣya-lē* from *vy-áya-ti* 'enwraps, covers', *dhārayīṣyá-ti* from *dhār-áya-ti* 'holds'.

§ 753. Sanskrit has an augmented preterite from the future stem, meaning *on the point of*; as *ābhariṣya-t* 'he was just going to take away, wished to take'. But this form usually stands as a conditional; and so Conditional it is called.

There are a few scattered instances (in the Maha-Bharata) of Injunctive forms, implying wish; as 2<sup>nd</sup> pl. mid. *bhaviṣya-dhvam*.

Similarly there are scattered Conjunctives; as Ved. 2<sup>nd</sup> sing. *kariṣyá-s*.

§ 754. Greek. It is not quite certain that the Greek  $\sigma$ -future has any immediate connexion with the Aryan and Balto-Slavonic *sjo*-type, as we have seen already (§ 747 p. 269).

With *-so-* (§ 748) and *-eo-* *-ao-* (§ 749), we find a third suffix, *-seo-*.

§ 755. (I) *-so-*, a productive suffix in Ionic-Attic and elsewhere. Examples in §§ 748 and 750.

There is an apparent anomaly in keeping  $\sigma$  after sonants in the future  $\sigma\tau\eta\text{-}\sigma\omega$ , as in the aorist  $\varepsilon\sigma\tau\eta\sigma\alpha$ . This is most simply explained as being due to the analogy of  $\delta\epsilon\iota\zeta\omega$   $\varepsilon\delta\epsilon\iota\zeta\alpha$  etc., consonantal stems. Compare I § 564 p. 421.

Stems in Liquid or Nasal generally conform to Type II (§ 757); but roots in  $\rho$  have *-σω* as well in the language of Homer and poets of the epic school:  $\varphi\theta\acute{\epsilon}\rho\sigma\omega$  (pres.  $\varphi\theta\acute{\epsilon}\rho\omega$  'I destroy') beside  $\varphi\theta\epsilon\rho\acute{\epsilon}\omega$  *-ō*.

Remark. Why is it that beside a fut.  $\varphi\theta\acute{\epsilon}\rho\sigma\omega$  there is no fut.  $*\varphi\theta\acute{\epsilon}\rho\omega$ , as might be expected from finding  $\varepsilon\kappa\sigma\iota\iota\omega$  side by side with  $\varepsilon\kappa\epsilon\rho\sigma\alpha$ ? This is explained without difficulty if we suppose  $\varepsilon\kappa\epsilon\rho\sigma\alpha$  to be analogical, and due to  $\varepsilon\kappa\tau\epsilon\iota\upsilon\alpha$   $\varepsilon\gamma\epsilon\iota\upsilon\alpha$  and the like (I § 563 Rem. 2 p. 419); for there were no such futures as  $*\kappa\tau\epsilon\iota\upsilon\omega$  for  $*\kappa\tau\epsilon\nu\sigma\omega$ . Wackernagel's view of  $\varepsilon\kappa\epsilon\rho\sigma\alpha$  (Kuhn's Zeitschr. xxix 127 ff.) is not convincing, to my mind.

Wackernagel would anyhow have to meet the question whether, if *φθέρω* really comes from *\*φθερσχω*, it must not have kept *-ρσ-* under all circumstances, wherever the accent lay; cp. *νίσσομαι* for *\*νισσχομαι* contrasted with *ἐκτείνω* for *\*ἐκτενσά* (The Author, Gr. Gr.<sup>2</sup> p. 61).

§ 756. *-σο-* forms futures from all sorts and kinds of stems, present, aorist, and perfect. Often there are parallel *σ-*aorists.

(1) Hom. *διδώ-σω* (beside *δώ-σω*) from *δί-δω-μι* 'I give', Class III. *διδάξω* from *δι-δάσχω*, Class XXIII (aor. *ἐδίδαξα*). Hom. *ἄῤῥω* Att. *ἄῤῥω* from *ἄίσσω* 'I rush', *ποι-φύξω* from *ποι-φύσσω* 'I pant, puff', *ποι-πνύσω* from *ποι-πνύω* 'I snort, pant, puff', Class XXVII (aor. *ἤξα ἤξα* etc.).

(2) *κλάγξω* (*ἐκλαγξα*) beside *κλάζω* 'I cry, shout' for *\*κλαγγ-ιω*, Class XXIX, and *κλαγγάνω*, Class XIV (§ 621 p. 158, § 628 p. 165, § 744 p. 266). Ion. *λάμψομαι* beside Att. *λήψομαι* from *λαμβάνω* 'I take', Class XIV (§ 621 p. 158). *σφίγξω* (*ἐσφίγξα*) from *σφίγγω* 'I tie, bind', Class XVI (§ 631 p. 167).

(3) From the Denominative presents *κηρύσσω* 'I announce' *ἀρπάζω* 'I carry off' *σαλπίζω* 'I trumpet' *μειλίσσω* 'I soothe, pacify' *τελέω -ω* 'I complete' we have the futures *κηρύξω* *ἀρπάξω* *σαλπίξω* *μειλίξω* *τελέσ(σ)ω* (aor. *ἐκήρυξα* etc.), on the analogy of *πράξω* : *πράσσω*, *σφάξω* : *σφάζω* and the like (cp. *θανυμανῶ ἀγγεῶ* § 757). What made it all the easier for these futures to arise, was that there existed in pre-Greek times denominative participles like *κηρυκ-τό-ς* (*ἄ-κήρυκτο-ς*), which seemed parallel to *πράκ-τό-ς* *σφακ-τό-ς* (II § 79 pp. 224 f.).

(4) The combination *-η-σο-* was an especial favourite (§ 750.1 p. 271). First, a class of futures from the stem of the aor. pass. in *-η-ν*. *μυν-ή-σομαι* beside *ἐ-μάν-η-ν* 'I grew mad' (*√men-*), like Lith. *min-ě-siu* beside *mīn-ė*. *σβ-ή-σομαι* beside *ε-σβ-η-ν* 'I was quenched' (*√seg-*). *ρυν-ή-σομαι* beside *ἐ-ρρύ-η-ν* 'I flowed' (*√rex-*). *μυγ-ή-σομαι* beside *ἐ-μύγ-η-ν* 'I mixed myself' (*√meiḡ- meiḡ-*). With the same type, *δοθ-ή-σομαι* beside *ἐδόθ-η-ν* etc., the set of forms due to the analogy of *ἐ-δόθ-ης* = *á-di-thas*. See § 589 pp. 129 f. In Doric, this intr.-pass. future has an active ending: *μυνησεῖν συναχθησοῦντι* (*-σι-ο-* instead of *-σο-*, § 758). Further: *-η-σο-* occurs in forms like *σχ-ή-σω* (beside

ἔξω) from stem of ἔσχο-ν 'I held' (cp. ἔσχηκα), μελ-ή-σει from μέλει 'it is a care' (cp. ἐμέλησε μεμέληκε), ἐθελ-ή-σω from ἐθέλω 'I wish' (ἐθέλησα ἡθέληκα), ἐνδ-ή-σω from εὕδω 'I sleep' (cp. καθ-ευνδῆσαι); of the same kind are Lith. *drebe-siu* from *drebu* 'I tremble', *tekė-siu* from *tekù* 'I run, flow'. The same type of future is seen in stems marked as present or aorist, where it retains the special tense mark, as καθ-ιζήσομαι from ἵζω 'I set' for \**si-zd-ō* (cp. -ιζῆσαι ἵζηκα), βουλήσομαι from βούλωμαι 'I wish' ground-form \**ql-no-* § 611 p. 150 (cp. βεβούλημαι) βοσκήσω from βό-σκω 'I pasture, feed', τυπτήσω from τύπ-τω 'I strike' (cp. ἐτυπτησα), χαίρήσω from χαίρω 'I rejoice' for \**χαρ-ιω* (cp. ἐχαίρησα), ὀζήσω from ὀζω 'I smell' for \**ὀδ-ιω* (cp. ὠζησα), πεπιθήσω from πε-πιθ-εῖν 'to persuade', πεφιθήσομαι from πε-φιθ-έ-σθαι 'to spare'.

(5) The original identity of flexion in the groups typified by \**τιμᾱ-ιω* (from *τιμᾱ́* 'honour') and \**δρα-ιω* (*δρῶ* 'I do') — compare Aeol. ἐτίμᾱ-μεν like ἐδρα-μεν 'we ran' — made the later set of denominatives run parallel to verbs of Classes X and XXVIII in other tenses besides the present. Hence *τιμᾱ́σω φιλήσω μισθώσω* like *δράσω νήσω γινώσομαι*; similarly Lith. *dovanó-siu* from *dovanó-ju* 'I present' (*dovanà* 'gift') like *žió-siu* from *žió-ju*, and *jũkũ-siu* (*jũkṹ-ju* 'I jest' from *jũka-s* 'jest'), in correspondence with Gr. *μισθώ-σω*. Following out the analogy further we get *κονί-σω* from *κονίω* 'I make dusty' (*κόνι-ς* 'dust') *δακρύ-σω* from *δακρύω* 'I cry' (*δάκρυ* 'a tear'); so also Lith. *daly-siu* from *daly-ju* 'I share, divide' (*dali-s* 'a part'). Compare § 773.

(6) Futures in -σω from perfect forms. ἑστῆξω from ἑστηκα 'I stand'. λείψειται from λείπεται 'is left over'. μεμνήσεται from μέμνηται 'remembers'. Hom. κεχαρήσω from κεχαρηώς 'glad'.

§ 757. (II) -εο- -αο- -οο- -υο-.

-εο- (becomes -ιο- in Dor., I § 64 p. 51) is the ordinary future suffix in liquid or nasal stems, as φθερέω -ῶ (beside Hom. φθέρσω), τενέω -ῶ, see § 749 p. 271.

Hence -εο- spread to the future of stems which had a nasal formative suffix in the present; as φανέω -ῶ from φαίνω

'I show, make appear' for \**τρα-ν-χω*, *κλινέω* -*ō* from *κλίνω* 'I bend' for \**κλι-ν-χω*, see § 611 p. 150, *ξανέω* -*ō* from *ξανίω* 'I scratch, comb' for \**ξ-αι-χω*, *ἀνάνέω* -*ō* from *ἀνάνιω* 'I make dry' for \**σανσ-αν-χω* (cp. Lith. *saus̃ti-siu*); see § 618 p. 156, § 621 p. 158. It also spread to Denominatives with liquid and nasal stems, as *θαυμαίνω* 'I wonder' *ἀγγέλλω* 'I announce': *θαυμανέω* *ἀγγελέω* -*ō*, not like *κηρύξω* from *κηρύσσω* (§ 756.3 p. 275).

Where -*ao-* and -*oo-* appear, the first vowel belongs to other forms besides the future; and so too once or twice -*ε-* in -*εο-*. *κρεμάω* -*ō* from *κρέμα-μαι* 'I hang' *κρεμά-σσαι* *κρεμά-θῃ*, *δαμάω* -*ō* from *δαμά-σσαι* *πυν-δαμά-τωρ*. *ὀμόομαι* *ὀμῶμαι* from *ὀμό-σσαι* 'swear' *ὀμῶμο-ται* *ἀπ-ώμο-το-ς*. *ὀλέω* *ὀλώ* from *ὀλέ-σσαι* 'to destroy' *ὀλώλε-κα* *ὀλε-τήρ*.

The analogy of *κρεμάω* : *κρεμάσ(σ)αι*, *ὀλέω* : *ὀλέσ(σ)αι*, and the like, produced from the aorists *δικάσ(σ)αι* 'to judge, investigate' (*δικάζω*) *δοκιμάσ(σ)αι* 'probare' (*δοκιμάζω*) the futures *δικάω* *δοκιμάω* -*ō*, and similarly we have *ἀμφιέω* -*ō* beside *ἀμφι-έσ(σ)αι* 'to put on',<sup>1)</sup> *μαχέομαι* -*οῦμαι* beside *μαχέσ(σ)ασθαι* 'to fight', *τελέω* -*ō* beside *τελέσ(σ)αι* 'to complete', *τανύω* beside *τανύσ(σ)αι*, and many others.

An exceptional group contains the Attic and Ionic future in -*ιέω* -*ιῶ* from a present in -*ίζω*, as *κομιῶ* from *κομίζω* 'I bring'; for which \**κομίω* might be looked for, to judge from *δικάω*. We may conjecture that the type was once actually \**κομίω*; and that \*-*ίω* became -*ιέω* -*ιῶ* as the effect of the constant use of -*έω* -*ῶ*. -*έω* is an intruder also in *ὀμέομαι* *ὀμεῖται* Dor. *ὀμῶμεθα* instead of *ὀμό-ομαι*.

Remark. There is some doubt whether -*ίω* instead of \*-*ίω* be as old as Homer; no argument can be based on the traditional accent of *κομιῶ* *ἀεικίῶ* *περιοῦσι*, and *ἀγλαΐεσθαι* may be a mistake for *ἀγλαΐεσθαι*. These are the only Homeric specimens of the type.

§ 758. (III) -*σεο-* (Doric Future).<sup>2)</sup> Whether -*σο-* =

1) We can hardly regard *ἀμφι-έω* as being \*-*φεσ-ω*, and a conj. to Skr. *cās-tē* Gr. *ἐπί-εσται*.

2) For the Doric Future, see now Solmsen, Kuhn's Zeitschr. xxxii 546 ff.



Skr. *-sya-*, or whether it is the conj. of the *s*-aorist, *-seo-* is *-so-* transformed under the influence of *-eo-*.

*-seo-* is the ordinary Doric suffix answering to Attic *-so-*; as *πρᾶξέω -lō βοᾷθησέω -lū*, but Att. *πρᾶξα βοηθήσω*. A few instances of it occur in Ion.-Att., as *φενξοῦμαι* beside *φειξομαι* (cp. the Author, Gr. Gr.<sup>2</sup> p. 170 footnote 1).

§ 759. Greek, besides the indic., partic., and inf. future, (*δεῖξω δεῖξων δεῖξιν*) had only the optative, as *δεῖξομαι*, which is quite a new formation (see the Author, Gr. Gr.<sup>2</sup> p. 188).

§ 760. Balto-Slavonic. Only *-sio-*, and nothing which answers to Skr. *-iṣya-* and Gr. *-eo-* *-ao-*, and so forth. In Lithuanian the future in *-siu* lived on, and still lives and forms a type; but in Slavonic it died before historic times began, all but the sole form O.C.Sl. *byśašteje* (§ 748 p. 271).

§ 761. The Lith. fut. *-siu* is inflected differently in different dialects. The 1<sup>st</sup> pl. is sometimes *dū-sia-m(e)* like *veřczia-m(e)* § 725 pp. 254 ff. (cp. partic. dial. *dū'sius* = *\*dūsiās*, and O.C.Sl. *byśašteje*); sometimes it is *dū-si-m(e)* — in High Lithuanian, for instance — like *āvi-m(e)* § 727 pp. 257 ff.<sup>1)</sup> The other forms which occur, pl. *dū'sme dū'ste* dual *dū'sva dū'sta*, like the 3<sup>rd</sup> sing. *būs gaūs*, are injunctives of the *s*-aorist (§ 828). The partic. *dū'sēs* (cp. O.C.Sl. *byśešteje*) admits of more than one explanation; see J. Schmidt, as cited in footnote.

Examples of Lith. fut. are given in § 748 pp. 269 f.

Where marks of the present are retained in the future, they are retained in the other forms from the Infinitive Stem.

Future from Present Stem with inserted nasal: *jūnksiu* from *jūng-iu* 'I put in the yoke', *skūsiu* from *skūndžiu* 'I weep, bewail myself', *lėnksiu* from *lenkiū* 'I bend', § 744 p. 267. Compare Gr. *κλύξω* etc. § 756. 2 p. 275.

From Present in *-inu -enu*: *sausī-siu* from *sausinu* 'I make dry', *gyvė-siu* from *gyvenū* 'I dwell', see § 624 p. 161. Compare Gr. *ἀνᾶνω* § 757 p. 277.

1) J. Schmidt's assumption (Neutra, pp. 423 ff.) that *dū'sime* is an optative, is wrong. Idg. *-i-* would remain long in Lithuanian.

The combination -*é-siu*. *miné-siu* from *menù* 'I think of' pret. *mīnē*, cp. Gr. *μᾶν'-σομαι* *ē-μᾶν-ν*. *drebě-siu* from *drebu* 'I tremble'. *stené-siu* from *stenù* 'I groan'. *pené-siu* from *penù* 'I nourish, fatten'. *avé-siu* from *aviù* 'I have something on my feet'. Compare § 756. 4 p. 275.

Later Stratum of Denominatives. *dovanó-siu* from *dovanó-ju* 'I give' (*dovanà* 'a gift'), *pāsako-siu* from *pāsako-ju* 'I recount, tell' (*pā-saka* 'tale'), like *žió-siu* from *žió-ju* 'I open my mouth' (§ 740 p. 264), cp. Gr. *τῖμᾶ-σω*. *jũkũ'-siu* from *jũkũ'-ju* 'I sport, jest' (*jũka-s* 'jest'), *jũdũ-siu* from *jũdũ-ju* 'I have a black sheen', analogous to Gr. *μυθῶ-σω*. *daly-su* from *daly-jũ* 'I share, divide' (*daļ-s* 'a share, part'), *szirdy-siũ-s* from *szirdy-jũ-s* 'I take to heart' (*szirdĩ-s* 'heart'), like Gr. *κοι'-σω*. Compare § 756. 5 p. 276, § 773. *keláu-siu* from *keláu-ju* 'I travel' (*kēla-s* *kēle-s* 'way').

## Appendix to Classes XXVII—XXX.

Extension of Present Stems in -*sko*-, -*to*-, and -*dho*- -*do*- by the Suffix -*io*-.

§ 762. The reason why this extension of the -*sko*-class (XXII), the -*to*-class (XXIV) and the -*dho*- and -*do*-class (XXV) is relegated to an Appendix, and they are not allowed a class each to themselves, has been explained in § 704 p. 239.

§ 763. *io*-extension of *sko*-stems (§§ 669 ff.)

Sanskrit can show only a few passive forms with -*ya*- (cp. §§ 709 and 710, pp. 243 ff.), in stems where -*sko*- has lost its character as a present-forming suffix: *prch-yá-tē* from *prchá-ti* 'asks', *vañch-ya-tē* from *vañcha-ti* 'wishes' (§ 671 p. 203). Possibly *vṛśc-yá-tē*, from *vṛścá-ti* 'tears to pieces', is another; see § 669 p. 202.

Lith. *dresk-iũ* 'I tear' trans., beside *driskaũ*, O.C.Sl. *ištq* for *\*isk-ia* beside *iskq* 'I seek' (§ 677 p. 210).

Remark. Gr. *πτῶσω* 'I cower, oringe', in view of *πτῶσκᾶ-ω*, may be derived from *\*πτῶσκ-ιω*. However, *πτῶ-ξ -κός* and *πτῶ-χός* make it more natural to suppose that it comes from *\*πτῶ-κ-ιω* or *\*πτῶ-χ-ιω*.

Cp. *πησσω* 'I frighten' for \**πτα-κ-ιω*, *ἐγερήσω* 'I wake' for \**ἐγερη-κ-ιω* or -*χ-ιω*, and verbs in -*ώσω* such as *ὀνειρώσσω* (*ὀνειρώξω*) *ὑπνιώσσω* *ἰκτερώσσω*. The *κ*- and *χ*-suffixes in these words were probably the same as -*ko*- in -*s-ko*-; see § 669 p. 201.

§ 764. -*to*-stems extended by -*io*- (§§ 679 ff.).

Skr. *nṛt-ya-ti* 'dances, plays' pass. *nṛt-ya-tē* beside *nṛ-tā-mā-na-s*, pass. *yat-ya-tē* beside *yā-ta-tē* 'joins itself, strives' (§ 681 p. 213).

Lith. *siuncziū* 'I send', perhaps from \**su-n-to*- (§ 686 p. 218). O.C.Sl. *ob-reŝta* 'I find' perhaps from \**rē-to*- (§ 687 p. 218).

Remark. Gr. *ἀρύσσω* (only Hdt. vi 119) seems to be not an extension of Att. *ἀρύ-τω* 'I pour, I draw water' (§ 682 p. 214), but an analogical form, suggested by *ἀρύω*, on the type of *ἀφύσσω*: *ἀφύω* 'I pour, draw water'.

§ 765. -*dho*- and -*do*- stems extended by -*io*- (§§ 688 ff.).

(1) -*dh-io*-. Skr. *yú-dh-ya-tē* 'gets in motion, fights', *rā-dh-ya-tē* 'carries to a successful end' pass. *rādh-ya-tē* (§ 689 p. 220), *krú-dh-ya-ti* 'scorns', *sā-dh-ya-ti* 'comes to its goal' (§ 691 p. 221).

Gr. *θύσσομαι* 'I shake or quiver, am frantic' for \**θυ-θ-ιο-μαι* (§ 689 p. 220), *ἐσθ-ίω* 'I eat' (§ 694 p. 223, § 713 p. 247).

Lith. *skér-d-žiū* 'I burst, blow up' (§ 689 p. 219).

(2) -*d-io*-. Only passives in Sanskrit; as *mṛd-yā-tē* from *mṛ-d-nā-mi* 'I grind to pieces, crush' *vi-mradati* 'softens' (§ 690 p. 220), *khād-ya-tē* from *khā-da-ti* 'bites up, chews', *īd-ya-tē* from *īdā-tē* 'honours, praises' (§ 692 p. 222).

Gr. *κλύζω* 'I flood' for \**κλυ-δ-ιω*, *ἐκ-φλύζω* 'I spurt out' for \**φλυ-δ-ιω* (§ 695 p. 224).

Lith. *plau-d-žiū* 'I wash, cleanse', *spráu-d-žiū* 'I compel, press down' (§ 690 p. 221, § 700 p. 227).

(3) Doubtful: -*dh-io*- or -*d-io*-. Avest. *siž-d-ye-iti* 'drives away' (§ 693 p. 223). Lith. *mér-d-žiū* 'I lie a dying', *skél-d-žiū* 'I split or burst', *sru-d-žiū* 'I make bloody', Lett. *e'rfchu* 'I separate' for \**erd-ī-u* (§ 701 p. 227).

## Class XXXI.

Later Group of Denominatives with Present-Suffix *-iō-*.

§ 766. We here discuss present stems like Skr. *dēva-yá-ti* 'he worships the gods' from *dēvá-* 'god', Gr. *φιλέ-(λ)ω* 'I treat as a friend' from *φίλο-ς* (*φίλε-*) 'friend', Skr. *namas-yá-ti* 'he offers worship or respect' from *námas-* 'respect', Gr. *τέλε(σ-λ)ω* 'I end' from *τέλος* 'end' (*τέλεσ-*). This is a productive type in almost all languages of our group, and beyond all doubt is as old as the parent language.

As I have pointed out (§ 487 p. 43, § 703 p. 232), no hard and fast line can be drawn between the verbs which grammars usually call Denominative and what they call Primary Verbs. When denominative verbs were formed in the parent language, no new and peculiar mode of conjugation was invented for them. They ran in old grooves; the present stem preferring as its type stems with the secondary suffix *-iō-*. It was only by degrees that inflexional peculiarities sprang up; chiefly because *-iō-* coalesced with the final of the preceding noun-stem, and thus made new suffixes. But the peculiar denominative endings often came again to be the same as those of primary verbs by the action of the laws of language.

§ 767. The proethnic language possesses *iō*-presents from all kinds of consonant stems, from stems in *-a-* (*-a-iō-*), in *-o-* (*-e-iō-*), in *-i-* (*-i-iō-*), and in *-u-* (*-u-iō-*).

So great are the changes worked by analogy, that it is rather rare to find a denominative agreeing with the Idg. type in more than one or two languages. Thus, Lat. *oper-a-rī* (Umbr. *osatu* 'operato' Osc. *úpsannam* 'operandam') and *nōmin-a-re* do not correspond with Skr. *apas-yá-ti* and Gr. *ὀνομαίνω*, which do represent the Idg. inflexion; because, in Latin, denominatives of *s-* and *n-*stems had been attracted into the *a*-class in pre-historic times.

## § 768. (1) Consonant Stems.

Skr. *rajas-yá-ti* 'turns to dust' (in older Sanskrit only *rajas-yá-s* 'dusty'), Goth. *riqiz-ja* 'I darken myself', common ground-form *\*reges-ié-ti*, from *rájas* n. 'dust' *riqis* n. (gen. *riqizis*, see II § 132 p. 420) 'darkness'. Skr. *apas-yá-ti* 'is active' from *ápas* n. 'work' *apás-* 'active'; *namas-yá-ti* Avest. *nemaít-yē-iti* 'bows, reveres, worships' from *námas* *nemō* n. 'reverence'; Skr. *avas-yá-ti* 'seeks help' from *ávas* n. 'help'. Gr. Hom. *τελείω* *τελείω* Att. *-ō* 'I end' for *\*τελεισ-ιω* (aor. *τέλεσ-σαι*) from *τέλος* n. 'end'; Hom. *ἰκέομαι* *ἰκέομαι* 'I heal' (aor. *ἰκέσ-σασθαι* from *ἰκος* n. 'healing'. Lat. *fulgur-iō* from *fulgur*. O.H.G. *refs(i)u* 'I blame, scold, chasten', cp. Skr. *rapás-* 'bodily hurt'. — Avest. *xrviš-yē-iti* i. e. *xruviš-yē-iti* 'sheds blood' from a stem *\*xr(u)viš-*, ground-form *\*qruuṣ-*, closely akin to Skr. *kraviš-* 'raw, bloody flesh'. Gr. *γελάω* 'I laugh' for *\*γελασ-ιω* from stem *γελασ-* (nom. *γέλως*) 'laughter' ground-form *\*gelās-* (II § 134 p. 425).

Gr. *ὀνομαίνω* Goth. *namn-ja* 'I name' from *ὄνομα* *namō* n. 'name', the former for *\*-mṇ-iō*, the latter for *\*-mṇ-iō* (cp. Idg. *\*mṇ-iō-* and *\*mr-iō-*, *\*bhu-iō-* and *\*bhu-iō-* § 707 p. 235). All the following have Idg. *-ṇ-iō-*. Skr. *vṛṣan-yá-ti* 'is in heat or passion' from *vṛṣan-* 'male', *brahman-yá-ti* 'is pious' from *bráhman-* n. 'piety' *brahmán-* 'pious person, one who prays'; Avest. *vyāxmainyē-iti* 'deliberates, thinks over' from *vyāxman* n. 'assembly, consultation'. Gr. *τεκταίνω* 'I carpenter, make' from *τέκτων* 'carpenter, workman'; *σπερμαίνω* 'I give forth seed' from *σπέρμα* 'seed'. Goth. *glitmun-ja* 'I shine' from *\*glitmin-* (cp. O.H.G. *glizemo*) 'brightness'.

Skr. *vadhar-yá-ti* 'shoots, lets off a missile' from *vádhar* n. 'shot'. Gr. *τεκμαίρω* 'I mark, fix' from *τίκμαρ* n. 'mark, boundary'. We may perhaps assign to this section Latin desideratives like *scripturiō* from *scriptor*, *esuriō* from *ēsor*; *-turiō* for *\*-tor-iō* *\*-tṛ-iō*.<sup>1)</sup>

1) This explanation follows Thurneysen, *Über Herkunft und Bildung der lat. Verba*, p. 66. A different view is that of Kretschmer, Kuhn's

Gr. *βλίττω* 'I cut the honey-combs' (fut. *βλίσω*) from *μέλι*-n. 'honey'. Lat. *dent-iō* from *dēns*. Goth. *veitvōd-ja* 'I certify' from *veitvōd-* 'witness'. Skr. *iṣudh-yá-ti* 'begs, prays' Avest. *išud-ye-iti* 'confesses guilt' from Avest. *išud-* 'a cry by which one acknowledges sin'. Gr. *κορύσσω* 'I helm, arm' for \**κορυθ-ιω* from *κόρυς* -υθ-ος 'helmet'. Lat. *custōd-iō* from *custōs* -ōd-is.

Gr. *λιθαῖω* 'I stone' from *λίθος* -άδ-ος 'stone', *μιγάζομαι* 'I mingle with' from *μιγάζ* -άδ-ος 'mixed, motley'. In Germanic, 'verbs in -*atjan* answer to this Greek denominative group; but the noun stems from which they came had disappeared before the historic period: Goth. *lauhatja* O.H.G. *lougazzu lohazzu* 'I shine' (cp. Gr. *λενκάς*), Goth. *svōgatja* 'I sigh' *kaupatja* 'I box the ears' (pret. *kaupasta*), O.H.G. *blecchezzu* 'I lighten' (cp. II § 128 p. 409).

To the denominatives formed from cons. stems have always belonged *to*-participles, as Gr. *ἀκρο-τό-ς* Lat. *sceles-tu-s*, Gr. *θαυμα-τό-ς* (Skr. *śrōma-ta-m* O.H.G. *hlīumun-t* Lat. *cōgnōmen-tu-m*), Skr. *án-ap-ta-s* etc. See II § 79 pp. 224 f., § 82 p. 249.

§ 769. (2) *a*-stems: Idg. -*a-iō*-.

In a great many languages there are found other forms without. -*iō*-, as 1<sup>st</sup> pl. Armen. *jana-mē* Gr. Aeol. *τῆμα-μεν* Lat. *plantā-mus* O.Ir. *no chara-m* Goth. *salbō-m* Lith. *já'sto-me*. These kept close with the old primary *a*-verbs of Class X. In principle, the two groups are really the same.

Gr. *ὁράω -ω* 'I see', O.H.G. *bi-warōm* 'I observe, am ware' beside Gr. \**Forā* in *φρουρά* 'outlook, protection' O.H.G. *wara* 'care, protection'. Lat. *forō -ā-s* etc., O.H.G. *borōm* 'I bore' from O.H.G. *bora* 'borer' (ground-form \**bhyr-ā*-), but cp. § 579 p. 122. Skr. *pṛtanā-yá-ti* 'fights' from *pṛtanā* 'fight', *manā-yá-ti* 'is attached' from *mand* 'attachment'. Gr. *τιμάω -ω* 'I honour' from *τιμᾶ* (-ή) 'honour', *ῥεβᾶω -ω* 'pubesco' from *ῥεβᾶ* (-ή) 'ripeness', *ὀρμάω -ω* 'I drive or urge' from *ὀρμά* (-ή) 'movement'. Lat. *plantō -ā-s* etc. from *planta*, *cūrō* from *cūra*,

Zeitschr. XXXI 464: he starts with an adj. like \**scriptu-ro-* (cp. Att. *οἰζυ-εός*; from *οἰζύ-ς οἰζύος*; II § 74 p. 184).

*lacrimō* from *lacrima*. O.Ir. *rannaim* 'I divide' from *rann* f. 'part', *iccain* 'I heal' from *icc* f. 'health'. Goth. *salbō* O.H.G. *salbōm* A.S. *sealfie* 'I salve, anoint' from O.H.G. *salba* A.S. *sealf* 'salve, ointment'; Goth. *karō* 'I take trouble, care about' O.H.G. *charōm* 'I bewail, lament' A.S. *cearie* 'I care' from Goth. *kara* 'care' O.H.G. *chara* 'woe, sorrow, lament' A.S. *cearu caru* 'care'; O.H.G. *klagōm* 'I lament' from *klaga* 'lament'. Lith. *lankó-ju* 'I bend to and fro, try to make malleable' beside *lunkà* 'valley' *į-lanka* 'a dip or bend', O.C.Sl. *laka-jā* 'I trick, deceive' from *laka* 'bending, bosom, rascality, deceit'; Lith. *dovanó-ju* 'I give' from *dovanà* 'gift', *bylō-ju* 'I speak' from *bylà* 'speech', *pāsako-ju* 'I recount' from *pā-saka* 'tale'; O.C.Sl. *kotora-jā se* 'I fight' from *kotora* 'fight', *vonja-jā* 'I smell' from *vonja* 'a smell'.

Very common are *a*-verbs derived from *o*-stems, principally with transitive meaning, — 'to show oneself so and so, to make so and so'. Skr. *priyā-yá-tē* 'he makes friends with' Goth. *frijō* 'I treat kindly' O.C.Sl. *prija-jā* 'I am kind to, stand by some one' from Skr. *priyá-s* 'dear, friend' Goth. \**frija-* in *frija-þva* 'love'. Lat. *novō* (*-a-s*) O.H.G. *niuwōm* 'I renew' beside Lat. *novo-s*.<sup>1)</sup> O.Ir. *com-alnaim* O.H.G. *follōm* 'I fill' from O.Ir. *lan* (Idg. \**pŕ-no-s*) O.H.G. *fol* (Idg. \**pŕ-no-s*) 'full'. Lat. *gustō*, O.H.G. *costōm* A.S. *costie* 'I try, taste' beside Skr. *juṣ-ṭa-s* 'beloved' etc., √ *ḡeyṣ-*. Skr. *tilvilayá-tē* 'shows himself rich' from *tilvila-s* 'rich', *rathirayá-ti* 'hurries up' from *rathirá-s* 'hasty', *ṛtāyá-ti* 'keeps the rule' from *ṛtá-m* 'order', *sumnāyá-ti* 'shows goodwill' from *sumná-s* 'well-wishing' *sumná-m* 'goodwill'; Avest. *vādayē-iti* 'strikes' from *vāda-* m. 'blow'. Gr. *γοῖβάω* 'I cleanse' from *γοῖφο-ς* 'clean', *ἀτιμάω* 'I treat as dishonoured' from *ἀ-τίμο-ς* 'dishonoured' *μωμάομαι* 'I scorn' from *μῶμο-ς* 'scorn', *ἐδνάομαι* 'I portion' from *ἐδρο-ν* 'dower'. Lat. *cavō* from *cavo-s*, *firmō* from *firnu-s*, *sānō* from *sānu-s*, *armō* from pl. *arma*, *cumulō* from *cumulu-s*, *damnō* from *damnu-m*. O.Ir. *marbaim* 'I kill' from *marb*

1) Gr. *ρεῖω* 'I turn up fallow land' probably has its place elsewhere. See Sütterlin, *Zur Gesch. der verba denom. im Altgr.*, I 21 f.

'dead', *derbaim* 'I prove' from *derb* 'certain', *forcennaim* 'I end' from *cenn* *for-cenn* 'end', *biathaim* 'I nourish' from *biath* 'nourishment', cp. Gall. *Γαισάροι* pl. 'pilati' beside Gall.-Lat. *gaesu-m* 'spear'. Goth. *vairþō* O.H.G. *werdōm* 'I value, treasure' from *vatrþ-s* *werd* adj. 'worth', Goth. *ga-vundō* O.H.G. *wuntōm* 'I make wounded, wound' from *vund-s* *wunt* 'wound', Goth. *ga-leikō* 'I compare, make like' from *ga-leik-s* 'like', O.H.G. *ebanōm* 'I make even' from *eban* 'even', Goth. *bi-ráubō* 'I rob, plunder' O.H.G. *roubōm* 'I rob' from O.H.G. *roub* 'robbery', O.H.G. *zeihhonōm* 'I mark, draw' from *zeihhan* 'mark'. Lith. *kilnó-ju* 'I lift to and fro' from *kilna-s* 'high' (unless it be preferred to class this verb in § 606 p. 147), *mirkšnio-ju* 'I wink, twinkle' from *mirkšni-s* (gen. *mirkšnio*) 'glance, a single movement of the eyelid', Lett. *at-jáunāju* 'I make young, renew' from *jáun-s* 'young', *gūdá-ju* 'I honour', from *gūd-s* 'honour' *apšchūgāju* 'I enclose' from *schūg-s* 'hedge, fence'; O.C.Sl. *děla-ja* 'I do, make' from *dělo* 'work', *pri-veslaja* 'adveho' from *veslo* 'oar, rudder'. The beginnings of this series of derivatives from *a*-verbs from noun stems in *-a-* goes back to the proethnic stage; at that time there were often subst. abstr. with *-a-* alongside of *o*-adjectives and *o*-substantives. Thus the O.H.G. *follōm* may be derived, if we please, not from *fol* but from Germ. \**fullō-* = Avest. *per'nā-* 'fulness', which appears in Goth. *fullō* O.H.G. *folla* 'fulness'; or Lat. *offēnsāre* may be derived from subst. *offēnsa* and not from *offēnsu-s* (cp. II § 158 pp. 473 ff.). These and like verbs were from the first closely associated with the *o*-stems belonging to these *a*-nouns; and thus it became possible afterwards to derive verbs in *-a-īō* straight from *o*-stems. The ending *-aīō* found favour for another reason too; namely, that there was from the earliest period another group of verbs in *-aīō*, originally denominative too, but with this character long since lost: I mean verbs of Classes X and XXVIII, like Lat. *hi-ō* Lith. *ži-ó-ju*, Gr. *ύλ-άω* Lith. *ul-ó-ju* (Lat. *ululō*), Lat. *juv-ō* *mic-ō*, O.Ir. *scaraim*, Goth. *mit-ō* O.H.G. *mezzōm*, Lith. *lind-o-ju* O.C.Sl. *raz-vríz-a-ja* (§§ 579 ff. pp. 121 ff., §§ 734 ff. pp. 261 ff.).



As well as these present stems in *-a-ḡō*, most languages have non-present stems with *-a-* just like those formed from *a*-verbs in Classes X and XXVIII. The latter are the type, the former copied from them. The commonest are verbal nouns, always more or less closely connected with the verb system, with the suffixes *-to-* *-ti-* *-no-* and so forth; e. g. Gr. *τῖμῆ-τό-ς* *τῖμῆ-σί-ς* from *τῖμάω*, Lat. *plantā-tu-s* *plantā-tiō* from *plantō*, O.Ir. *carthe* 'loved' from *caraim*, *cēssad* 'suffering' from *cēssaim*, Goth. *laþō-þ-s* 'invited' *laþō-n* 'to invite' *laþō-n-s* 'invitation' from *laþō*, Lith. *dovanó-ta-s* 'given' *dovanó-ti* 'to give' from *dovanó-ju*, O.C.Sl. *laka-nŭ* 'deceived' *laka-ti* 'to deceive' from *laka-ja*. Then we have certain tenses, as Gr. *τῖμῆ-σω*, Lat. *plantā-rem*, Lith. *dovanó-siu* O.C.Sl. *laka-chŭ*. Compare § 756. 5, p. 276, § 761 p. 279, § 822. 6.

§ 770. (3) From *o*-stems there were two ways of deriving the present stem. One of them, doubtless the older, suppresses the final vowel of the noun stem. This we have already seen in Classes XIV and XXIX, exemplified by Skr. *turaṇ-yá-ti* from *turáṇa-s*, Gr. *ὀλισθαίνω* from *ὀλισθαρό-ς* (§§ 616 ff. pp. 154 ff., § 743 pp. 265 f.). This is just how *ḡo*-adjectives are generally derived from noun stems in *-o-*, as Skr. *áśv-īya-s* Gr. *ἵππ-ιο-ς* from *áśva-s* *ἵππο-ς* (II § 63 p. 126, and Rem. 3 p. 132). The second, and commoner, formation ends in *-e-ḡō-* (cp. voc. in *-e*, loc. in *-e-ḡ* and so forth, II § 59 p. 108). This recalls Skr. *hiranyá-ya-s* 'golden' from *hīraṇya-m* 'gold', and Lat. *aureu-s* (*auru-m*), if it is to be explained *\*aure-ḡo-* (cp. II § 63 p. 128).<sup>1)</sup>

(a) With Aryan present stems in *-an-ḡa-ti* are associated but few from other *o*-stems: Skr. *adhvar-yá-ti* 'performs an offering' from *adhvará-s* 'offering', *vithuryá-ti* 'staggers, reels' from *vithurá-s* 'tottering, reeling', *rathakāmya-ti* 'asks for a car' from *ratha-kāma-* 'desirous of having a car', Avest. *vāstryē-iti* 'feeds' from *vāstre-m* 'meadow, field, fodder', *avāstryē-itē*

1) It is noteworthy how well the isolated Ved. *varṣyá-ti* 'he woos' (*vará-s* 'wooer') agrees with the above mentioned adj. in *-ḡya-*, *pāuruṣḡya-s* from *pūruṣa-s* and the like.

'is idle' from *avāstra-* 'idle'. In Greek *-aino* was a fertile type (see § 776.6 b); and many other nouns in *-o-* took this formation in the present, as *ἐχθαίρω* 'I hate' from *ἐχθρό-* 'hated, hostile' (I § 293 p. 234), *ἀγγέλλω* 'I announce' from *ἄγγελος* 'messenger', *αἰόλλω* 'I move quickly backwards and forwards' from *αἰόλος* 'quickly moving', *καμπύλλω* 'I crease, bend' from *καμπύλος* 'bent', *ἀπινύσσω* 'I am unintelligent' from *\*ἀ-πίνυρος* (*πινυρό-* 'intelligent'), *μειλίσσω* 'I soften, mollify' from *μείλιχος* 'soft', *χαλέπτω* 'I crush, overpower' (cp. § 682 with the Rem. p. 214). The same kind of denominatives occurs in Slavonic. First those which contain abstract nouns in *-e-to-* and the like (II § 79 p. 236), as *trepeštq* 'I tremble' 2<sup>nd</sup> sing. *trepešteši* inf. *trepetati* from *trepetŭ* 'a trembling', *blekoštq* 'I bleat' inf. *blekotati* beside Czech *blekot* 'a yelping or barking', *rŭpŭštq* 'I growl' inf. *rŭpŭtati* from *rŭpŭtŭ* 'a growling', *skrižŭštq* 'I rattle, gnash the teeth' inf. *skrižŭtati* from *skrižŭtŭ* 'a gnashing with the teeth', and others of this sort (the noun may also be a *tā*-stem, as *klevēštq* 'I calumniate' inf. *klevetati* from *kleveta* 'calumny'). Besides these I place here the present in *-ujq* for *\*-om-ia*, as *běsuja* 'I am mad' 2<sup>nd</sup> sing. *-uješi* inf. *-ovat* from *běsovŭ* 'mad, devilish', and that from *běsŭ* 'demon'; for further details see § 782.3. We cannot tell whether Idg. presents like Skr. *turaṇ-yá-ti* and Gr. *ὀλισθαίνω*, to which *trepeštq* and *běsuja* are parallel, survived down to Slavonic. At all events these present forms have nothing exceptional about them, as the Slavonic had a great number of primitive verbs in *-ja* with inf. *-a-ti*, such as *ližq* *lizati* 'to lick' *gyblja* *gybati* 'to destroy, lose', and some of these put on the look of denominatives, as *glagolja* *glagolati* 'to speak' (cp. § 732 p. 260) did because of the kindred noun-stem *glagolŭ* 'word', and *dušq* *duchati* 'to breathe, blow' because of the noun *duchŭ* 'breath'. So it would be possible to believe that it is only on this analogy that *trepeštq* was formed from *trepetŭ*, and *běsuja* from *běsovŭ*.

Whether the other Idg. languages had such denominatives is doubtful. In Armenian we meet with denominatives in *-im*, as *taram-i-m* 'I fade' beside *an-taram* 'unfading'. This group

is a new formation, on the lines of Class XXVI, § 711 p. 246, as Lat. *custōdī-s finī-s* follow verbs primitive like *farc-ī-s* (§ 777). But the contained stems in *-iō* need not be compared with Skr. *turaṇ-yá-ti*; they may have arisen out of denominatives from *i*-stems. Similarly Lat. *catuliō* (beside *catulu-s*) *blandior* (beside *blandu-s*) *insāniō* (beside *in-sānu-s*) may be ad-formates of presents in *-i-iō*; and Germanic presents such as Goth. *hráinja* 'I cleanse' (*hráin-s* 'clean') *láusja* 'I loose' (*láus* 'loose') may be either this or derived from *-eiō* (see *b*, below).

(b) *-e-iō*. Skr. *vasna-yá-ti* 'haggles' Gr. *ἀνέομαι* 'I buy' from *vasná-s -m* *ἄνω-ς* 'price' (for *\*Fνω-vo-*, cp. Solmsen, Kuhn's Zeitschr. xxix 81 f.; for O.C.Sl. *věno*, see II § 66 p. 149). Lat. *seneō*, Lith. *senė-ju* 'I grow old' (*-ėju* instead of *\*-eju*, see below) beside Lith. *sėna-s* 'old'. Skr. *amitra-yá-ti* 'is hostile' from *á-mitra-s* 'foe', *kulāya-yá-ti* 'wraps itself up' from *kulāya-m* 'covering'; Avest. *vāša-yē-iti* 'draws the chariot' from *vāša- m*. 'chariot', *aša-yē-iti* 'is pious' from *aša-* 'pious' (cp. Skr. *ṛtáya-ti* with different accent, see §§ 793, 798), O.Pers. *a-šāraya-m* 'I protected, watched' from *\*ša-ra-* (Skr. *tr-ā-*), not actually found. Gr. *φιλέω -ō* 'I treat as a friend' from *φίλο-ς* 'dear, friend', *κοιρανέω* 'I rule' from *κοίρανο-ς* 'ruler', *νοστέω* 'I return home' from *νόστο-ς* 'homeward way', *εὐφημῶ* 'I use words of good omen' from *εὐ-φημο-ς* 'of good omen'. Lat. *claudeo* from *claudu-s*, *albeō* from *albu-s*, *flaveō* from *flavo-s*, *nigreō* from *niger*. Irish: perhaps *scorim scuirim* 'I unharness' from *scor* 'enclosure for unharnessed animals'. Probably forms in *-e-iō* = pr. Germ. *-iō* are at the bottom of Germanic stems like Goth. *rigneip* 'it rains' from *rign* 'rain', *háurnja* 'I blow on the horn' from *háurn* 'horn', Goth. *laúsja* O.H.G. *lōs(i)u* 'I loose' from *láus lōs* 'loose'; the last verb, like all transitive denominatives taken from adjectives in Germanic, can be counted to Class XXXII; see § 806. Balto-Slavonic has *-ē-iō* instead of *-e-iō* (§ 782.2): Lith. *gūdė-jũ-s* 'I am greedy' from *gũda-s* 'greed', *kerė-ju* 'I grow in stalks, like a bush' from *kėra-s* 'stalk', *kėtė-ju* 'I get hard' from *kėta-s* 'hard'; 1) O.C.Sl. *razumě-*

1) Kurschat, apparently with less correctness, *kėtėju*.

-*ja* 'I understand' from *raz-umū* 'understanding, reason', *cělě-ja* 'I get well' from *cělū* 'well, whole', *o-žestocaja* 'I harden myself' for \**o-žestokēja* (I § 76 p. 66), from *žestokū* 'hard'.

Remark. Greek verbs in -*ω* have their parallel in Lith. verbs with -*ąju*. I conjecture that these endings are special upgrowths in these languages (§§ 773, 776.4, 782.2). Of course if Idg. *o* in open syllables became Aryan *a*, there is a possibility that Ar. -*āya-ti* in some words comes from \**o-je-ti*.

§ 771. (4.) *i*-stems, Idg. -*iǵó*-. Gr. *μητιο-μαι* 'I devise, contrive' Lat. *mētiōr* 'I measure, sentence',<sup>1)</sup> from *μη-τι-ς* 'counsel, resolve, cleverness' Skr. *mā-ti-š* 'measure, correct perception'. Skr. *arati-yá-ti* 'brews mischief for some one' from *arati-š* 'ill luck', *janī-yá-ti* 'asks for a wife' from *jāni-š* 'wife', *kavi-yá-tē* 'acts like a wise man, is wise' from *kavi-š* 'wise man, seer' (on -*iyáti*, see § 774). Gr. *κοίτω* 'I make dusty' from *κόιν-ς* 'dust', *δηρτομαι* 'I strive' from *δηρ-ς* 'contention', *μηνίω* 'I grow angry' from *μην-ς* 'wrath'. Lat. *fīniō* from *fīni-s*, *febriō* from *febri-s*, *crīniō* from *crīni-s*, *grandiō* from *grandi-s*, *lēniō* from *lēni-s*. O.Ir. *fo-dālim* 'I divide up' (3<sup>rd</sup> sing. *fo-dālī*) from *dāil* 'part'. Goth. *dāilja* O.H.G. *teil(i)u* 'I divide' from Goth. *dāil-s* stem *dāili-* 'part'; Goth. *vēnja* O.H.G. *wān(i)u* 'I imagine, hope' beside Goth. *vēn-s* (stem *vēni-*) 'delusion, hope'; Goth. *dulþja* 'I observe a feast' from *dulþ-s* (stem *dulþi-*) 'feast', *anamahþja* 'I offer force to' from *ana-mahþ-s* (stem -*mahti-*) 'force'. Lith. *daly-jū* 'I divide' from *dālī-s* 'part', *szirdy-jū-s* 'I take to heart' (*szirdī-s* 'heart'); as regards -*y-ju*, instead of -*i-ju*, see § 782. 2.

§ 772. (5.) From *u*-stems, Idg. -*uǵó*-. Skr. *gatu-yá-ti* 'goes an errand' from *gātú-š* 'errand', *vasā-yá-ti* 'desires goods' from *vāsu* 'goods', *śatrū-yá-ti* 'appears as a foe' from *śātru-š* 'foe', *ṛjā-yá-ti* 'is straight' from *ṛjā-š* 'straight' (on -*ā-yá-ti* see § 774); Avest. *aəhu-ye-iti* 'makes oneself master of' from *aəhu-š* 'lord, master'. Gr. *φῑτρίω* 'I beget, produce' from *φῑτν*

1) A different account of *mētiōr* is given by Johansson, Beitr. zur Gr. Spr., 129.

'sprout, offspring', *φῑτν-ς* 'begetter, producer', *γηρόν* 'I make a sound' from *γηρυν-ς* 'voice', *οἰζύν* 'I lament' from *οἰζύν-ς* 'lament', *δακρύν* 'I weep' from *δάκρον* 'tear', *ἑθύω* 'I go straight towards' from *ἑθύ-ς* 'straight'. Lat. *statuō* from *statu-s*, *tribuō* from *tribu-s*, *metuō* from *metu-s*.

§ 773. We have now given the main lines of this denominative formation in Indo-Germanic.

Now we have seen in § 769 p. 286, that *ā*-verbs of this formation very early yield to the analogy of *ā*-verbs of Classes X and XXVIII so far as to make such forms as Gr. *τίμη-τός-ς* *ἐτίμη-σα*. Next, corresponding non-present stems with *-ē-*, *-ē-*, or *-ā-* associated themselves with the presents in *-e-īō* *-i-īō* and *-u-īō*; to which were soon added verbs with *-ō-* outside the present and with *-o-īō-* or *-ō-īō-* in the present, formed from *o*-nouns. In the case of Denominatives with *-ē-* and *-ō-*, the type was aided by *ē-* and *ō-* verbs of Classes X and XXVIII as well. These non-present formations are all found in several branches of Indo-Germanic. As far as our knowledge of the relations of the languages to one another now goes, it is hardly possible to say how many such forms are proethnic and how many are later.

Gr. *φιλη-τός-ς* *ἐφίλη-σα* *φιλή-σω* from *φιλέω* (*φίλο-ς*), compare *νη-τός-ς* *ἐνη-σα* *νή-σω*, *μελη-τέον* *ἐμέλη-σε* *μελή-σει* etc. (cp. § 587 pp. 127 f., § 589 pp. 129 ff., §§ 735 and 737 pp. 261 ff., § 756. 4 p. 275). Lat. *claudē-rem* (conj. of *s*-aorist) from *claudēō* (*claudu-s*), compare *nē-rem* *-plē-rem*, *vidē-rem* *tacē-rem* (§ 587 pp. 127 f., § 590 p. 132, § 708 pp. 238 ff., §§ 735 and 738 pp. 261 ff.). Lith. *gūdē-ti-s* *gūdē-siū-s* from *gūdē-jā-s* (*gūda-s*), O.C.Sl. *cělē-ti* *cělē-chŭ* from *cělē-ja* (*cělŭ*), compare Lith. *byrē-ti* *byrē-siu* (§ 740 p. 265). Gr. *ἀ-δήρῑ-το-ς* *ἐκόντῑ-σα* *κοντῑ-σω* from *κόντω* (*κόνι-ς*). Lat. *fīnī-tu-s* *fīnī-rem* from *fīniō* (*fīni-s*). Lith. *daly-ti* *daly-siu* from *daly-jū* (*dali-s*), O.C.Sl. *gosti-ti* *gosti-chŭ* from *goštā* for *\*gostīja* (*gostī*), § 782. 5. Gr. *ἀ-δάκρῑ-το-ς* *ἐδάκρῑ-σα* *δακρύν-σω* from *δάκρυν* (*δάκρον*). Lat. *statū-tu-s* from *statuō* (*statu-s*).

*-ō-* is commonest within the verb infinite; as Gr. *μισθω-*

-ρό-ς from *μισθός*-, Lat. *aegrō-tu-s* from *aeger* (stem *aegro-*), Lith. *ragū'-ta-s* O.C.Sl. *roga-tŭ* 'horned' from *rāga-s* *rogŭ* 'horn', being forms like Gr. *τίμη-ρός* from *τίμη*, Lat. *barbā-tu-s* from *barba*. Perhaps it was just verbal nouns of this kind which in Greek were the starting point for *ἐμισθω-ου μισθώ-σω μισθώ*, cp. *ἐτίμη-σα τιμή-σω τιμάω*; so in Lithuanian, *jũkũ'-siu jũkũ'-ju* like *dovanó-siu dovanó'-ju*. Compare § 770 Rem. p. 289.

The shapes taken by present *jo*-stems in different languages will concern us in §§ 774 ff.

The meaning originally conveyed by this denominative group was that the subject of the verb stood in some kind of relation to the noun it came from. What this relation was had to be gathered from the meaning of the noun and of the context. But it often happens that we find in historical periods some special sense attaching itself to a special denominative ending (*-āḡō -eḡō* etc.). In Sanskrit, for example, *-īyā-ti* implied desire; in Latin, *-ō -ā-s -a-t* were factitive, and *-eō -ē-s -e-t* intransitive. This special meaning always started with some particular verbs, where it came from the essential meaning of the noun these verbs were derived from. Then other verbs followed the same pattern. To conform to the pattern, the stem of the ground-noun is often quite neglected; thus we have Skr. *putriyā-ti* from *putrá-s* on the model of *jāniyā-ti* (from *jāni-ṣ*). As we saw in § 769 pp. 284 f., it is the ending *-ā-ḡō* which seems first to have trespassed beyond its own domain.

As a result of this specialising of endings to some particular sense, the same noun often served as base for several denominatives with different meanings; as Gr. *ἐστιάω* 'I receive at the hearth, entertain' and *ἐστρίω* 'I make into a hearth, found a house' both from *ἐστία*, *ἀσθενέω* 'I am weak' and *ἀσθενόω* 'I make weak', from *ἀσθενής*, Lat. *clāreō* 'I am clear' and *clārō* (*-ā-s*) 'I make clear' from *clāru-s*.

Remark. Considering how close was the tie between noun and derivative verb, it is not to be wondered at that such verbs often caused the creation of nouns which looked as though the verbs were derived from them ("noms postverbaux"). So, on the analogy of *lacrimāre*: *lacrima*, *rixāri*: *rixa* we have Lat. *pūgna* coined to match *pūgnāre*, which was

derived from *pūgnu-s*; in Greek, similarly, we have *νίκη* 'victory' growing out of *νικᾶω* 'I bring down, conquer' (II § 86 p. 256). There are many certain examples of this retrospective tendency in modern languages, as Ital. and Span. *liga* Fr. *ligue* from *ligäre*, Mod.H.G. *wach* from *wachern*. See Bréal, *Mém. Soc. Ling.* iv 82 f.; Osthoff, *M. U.* iv 224.

§ 774. Aryan. The original forms leave the old groove but rarely.

We shall treat below (§ 793) of the shifting of denominatives in *-a-yá-ti* to the track of Class XXXII, which gives rise to such a form as Skr. *mantrá-ya-tē*.

Instead of Idg. *-i-yó-* and *-u-yó-*, we find in Vedic *-i-yá-* *-u-yá-* and *-ī-yá-* *-ā-yá-*; see §§ 771, 772. It is not clear whether the analogy of primary verbs like *nī-yá-tē śrū-yá-tē* is at work (§ 709 pp. 243 f.), or if the *ī* and *ā* came from feminine stems in *-ī-* and *-ā-* (II § 109 pp. 333 f.); it might be held that *jani-yá-ti* belongs to *jāni-š*, *janī-yá-ti* to the byeform *jānī*, *kaṇḍū-ya-ti* 'scratches' to the fem. *kaṇḍū-* and not to the masc. *kaṇḍu-*. Perhaps both these forces acting together caused the vowel to become long.

The wider use of *-ā-yá-ti*, which began in pre-Aryan times (§ 769 pp. 284 f.), went further; and in later Sanskrit it took a special turn, and the middle voice was used to mean that the subject represented the noun which the form came from; as *śakracāpāya-tē* 'represents a rainbow, is like it' from *śakracāpa-m* 'rainbow'. Note for the typical form of the contained noun, Ved. *dhiy-āya-tē* 'is pious' *dhiy-āyā-nt-* 'attentive' from *dhī-* f. 'devotion, piety'; similarly *jm-āyā-nt-* 'struggling earthwards' from *kṣām-* f. 'earth' (II § 160 p. 482), unless it be from *jmān-* *ājma-* 'a way' ('way-making, carving a path').

*-ī-yá-ti* also was productive. On the model of *durgbhī-ya-tē* 'is hard to grasp' (*dur-gbhī-š* 'hard to grasp'), *kavi-yá-tē* 'is wise' (*kavi-š* 'wise'), *taviṣī-yá-tē* 'is strong' (*taviṣī* f. 'strength') sprang up others, as *adhvarīyá-ti* 'is present at the offering' from *adhvarā-s* 'offering', *pitṛīyá-ti* 'is fatherly' (gramm.) from *pitár-* 'father'. On the model of *janī-yá-ti* 'asks for a wife' (*jāni-š* 'wife') we have *putrīyá-ti* 'wishes for a son' from *putrá-s* 'son', *māṣīyá-ti* 'desires meat' from *māśa-m* 'meat'.

Thirdly, *-s-yá-* (from *s-*stems) once or twice leaves its proper sphere. *mānavasyá-ti* 'acts after the manner of men' from *mānavá-s* 'human' follows the type *svapas-yá-tē* 'acts nicely' from *sv-apas-* 'acting nicely'. *uruṣyá-ti* 'seeks the distance' from *urú* n. 'the distance' follows such verbs as *taruṣ-yá-ti* 'fights' (from *táruṣ-* n. 'fight').

Lastly, the ending *-arya-ti* grew into a type; beginning with *vadharyá-ti* 'lets fly a shot or missile', beside *vádhar-* and *vadhá-s* 'missile', it spread to *rátha-s* 'a chariot', and formed *ratharyá-ti* 'he drives in a chariot'.

Remark. I may mention here another word, Skr. *śrudhīd-ti* 'obeys'. This is derived from the imper. *śru-dhi* 'listen', which must have crystallised into something hardly more than a particle; the form is then like Gr. *ai-áizō* from *ai*, Mod.H.G. *bejahe* 'I say yes' *verneine* 'I say no' from *ja* and *nein*, Lat. *negō* from some form like *\*ne-gi* = Lith. *ne-gi* *ne-gu*, contained also in *neg-ōtium* *neg-ligō*.

§ 774<sup>a</sup>. Armenian. With *jo*-suffix only denominatives like *tāram-i-m*, § 770 pp. 288 f.

Without *jo*-suffix: *jana-m* and the like, see § 581 p. 123.

Still unexplained are denom. in *e-m*, as *gorce-m* 'I work' from *gorc* 'work', *sire-m* 'I love' from *sēr* 'love', *čue-m* 'I break up, depart' from *ču* 'a breaking up, departure'. As *jana-m* answers to Aeol. *τίμημι*, one would be inclined to place *gorce-m* parallel to *φίλημι*. But *i* would be expected as representing Idg. *ē*.<sup>1)</sup>

§ 775. Greek. The original ending *-āω* = Idg. *-a-īō* became *-āω*, not by rule, but by analogy of *-εω -ιω -υω*.

In several dialects we see *-ηω -ιω -ιω -υω* instead of the other quantity; as Lesb. *ἀδικήει*, Boeot. *ᾄμιώοντες* Delph. *σσεφανώετω* Hom. *ὑπνιόοντες*, Hom. *κονίοντες* *ἐρητύοντο*. Similarly *-āω*, as Hom. *μενοινήησι* and *ἡβᾶοιμι* or (with. Ion. *η*) *ἡβήοιμι*, which seems to have been the form originally used where the text has *ἡβᾶοιμι*. This *ā* is certainly not long because

1) Hübschmann points out to me the possibility that the analogy of, say, *ber* ('φορέω, latio' etc.): *berem* (= Gr. *φέρω*) may have produced *gorcem* in connexion with *gorc*. Cp. the denom. Skr. *mārga-ti* Gr. *τέμε-ρο* etc., § 487 p. 41.



the vowel was long originally (see above), nor did the other endings lengthen their first vowel by analogy of an *a* so preserved; the long vowel in all of them came from the future, aorist, and other parts which had it, so that *ῆβάω* follows *ῆβᾶ-σω*, *ἀδικήω* follows *ἀδική-σω*.<sup>1)</sup> At the same time, some power must be ascribed to the influence of present stems such as *χρήων* (§ 737 p. 263) and *θῶ* (§ 707 p. 236); for the other parts of these had the same endings as the denominatives which now concern us (*χρή-σομαι* like *φιλή-σω*, *θῶ-σω* like *δακρύ-σω* etc.). To hastily reject this element in the matter would be all the more foolish, because it is clear as day that Primitive verbs have had influence over Denominatives in the futures *ὀνομανέω -ῶ* beside *ἀρπάξω*, and

§ 776. Before turning to trace the way by which the various denominative endings became general types in Greek, we would quote some words of Sütterlin's. He says, "In the every-day language of inscriptions, analogy did not run riot as it did amongst the poets and orators, who were often forced to adopt new words and terms, and depended partly on these for effect". (Zur Gesch. der Verba denom. im Altgr., 1 5).

(1) The type *-aw*, which could be made from *o*-nouns even in pre-Greek times (§ 769 pp. 284 f.), did not spread so far as it might in forming factitives, because it was met by a counter-current, the *-ow* class (4). Thus *νεόω* 'I renew' may have caused \**νεFā-λω* = Lat. *novō* O.H.G. *niuwōm* to drop out of use (cp. p. 284 footnote). But in other directions *-aw* was fertile; it served to denote disease or diseased appetite, the production of sounds, mechanical operations, and the like. Examples: *λεπράω* 'I have an eruption on the skin' (from *λέπρᾱ* 'eruption') and similar words give rise to *ὕδερᾱω* 'I have dropsy' from *ὕδερo-ς* 'dropsy'; *ὀφθαλμιάω* 'I have diseased eyes' (from *ὀφθαλμιά* 'disease of the eyes') gives *ὕδερᾱω* from *ὕδερo-ς* (beside *ὕδερᾱω*), *ὀδοντιάω* 'I cut teeth' from *ὀδούς* 'a tooth'; *βοάω* 'I call, cry' from *βοή* 'cry' produces *γοάω* from *γός* 'lament'; whilst *κωνάω* 'I twist like a top' from *κῶνο-ς* 'top', *στιχάονται* 'they arrange themselves in rows' from *στίχοι* and *στίχες* 'rows', *σπαργανᾱώ* 'I wrap in swaddling clothes' from *σπάργανο-ν* 'swaddling clothes' follow *τεχνᾱώ* 'I work skilfully' from *τέχνη* 'skill', *μηχανᾱώ* 'I set to work' from *μηχανή* 'tool, means', and so forth. *-ιάω* became another kind of desiderative suffix: *στρατηγιάω* 'I strive to become a general' (*στρατηγιά*) and others like it gave rise to such forms as *ἀρχοντιάω* 'I strive to become archon' from *ἄρχων*, *μαθητιάω* 'I wish to be a pupil' from *μαθητής*; and the last-named verb served as a model for *βινᾱτιάω* 'volo coire' from *βινέω* 'coeo'.

Remark. In certain Greek dialects *-ew* is often found where we expect *-aw*; it is not always possible to suppose that these are due to the analogy of verbs in *-ew* from *o*-stems. Such are *ῥέβω* beside *ῥέβᾱω*, *δαπανέω* beside *δαπανᾱώ*. J. Schmidt, in his work on the Neuters (pp. 326 ff.), puts forward a view that in pr. Greek *eo* *aw* became regularly *eo* *ew*; that

thus *eo* *ew* and *ae* stood side by side in sets of verb-forms, ἡβέω ἡβᾶεις etc.; and that there was levelling in two directions, (1) ἡβάω ἡβάομεν etc. following ἡβᾶεις -ᾶει, (2) ἡβέω, -έει following ἡβέω -έομεν.

(2) Many are the meanings given by verbs in *-ew* which are formed from uncompounded *o*-stems; they stand in all sorts of different relations to the contained stem. Here are a few: *κοιρανέω* 'I am ruler' from *κοίρανο-ς* 'ruler', *οἰκέω* 'I dwell' from *οἶκο-ς* 'dwelling, house', *ἀριθμέω* 'I count' from *ἀριθμός* number, *μοχθέω* 'I toil' from *μόχθο-ς* 'labour'. This type was not very fertile in analogical imitations, though we have *ἡγεμονέω* 'I lead' (*ἡγεμών*) modelled upon *κοιρανέω*. But when these verbs were taken from compound stems, the case was different. These meant mostly to be or to act as something; and the type spread to an extraordinary extent. Examples of strictly correct forms: *οἰνοχοέω* 'I am wine-pourer' from *οἶνο-χόο-ς*, *δημιουργέω* 'I am a craftsman, artisan' from *δημιουργός*, *ἀδυνατέω* 'I am unable, weak' from *ἀ-δυνατός*; by analogy — *μισθοδοτέω* 'I am wage-giver' from *μισθο-δότη-ς*, *ἄφρονέω* 'I am senseless' from *ἄφρων*. It is true some of these verbs have meanings both transitive and intransitive, but this depends on the meaning of the ground-word; this *ταλαιπωρέω* means 'I plague' or 'I am plagued' because *ταλαι-πωρο-ς* means either suffering misery or inflicting it.

(3) With *-ew*-verbs derived from *o*-stems, another group originally ending in *-εσ-κω* ran together. Only in Homer is there a difference in form; there we have *-ew*, from *-εσκω*, and the intermediate *-ειω*, side by side: *τελείω* and *τελέω* (I § 131 p. 118). The coincidence of these two classes in the present caused analogy to act in other parts of the verb system. Even in Homer are found such forms as *ἀνθῆσαι* from *ἀνθέω* 'I bloom' for \**ἄνθεσ-κω* (*ἄνθος* n. 'bloom') on the analogy of *φιλῆσαι* from *φιλέω*, and *τετενχῆσθαι* 'to be armed' from *τένχεα* pl. 'arms'. Then came a number of verbs in *-ew* fut. *-ησω* from compound *εσ*-stems, as *ἀπειθέω* 'I am disobedient' from *ἀ-πειθής* 'disobedient', *εὐθαρσέω* 'I am of good courage' from *εὐ-θαρσής* 'courageous'; a step due partly to the fondness

which the Greeks showed for verbal derivatives in *-εω* from compound *o*-stems (for which see above, 2).

(4) The group of verbs in *-ω*, also from *o*-stems, is probably a purely Greek development, on parallel lines to *-εω* = Idg. *-e-īd* (see § 773 pp. 290 f.). At first probably there were forms of the verb infinite only, as those with the ending *-ω-το-ς*; these soon produced all the rest. *-αιω -ασιω* etc. may have been the type for *-ω* *-ωσω*: there is a likeness between *θριγκόω* 'I furnish with battlements or eaves' (*θριγκό-ς*) *στεφανόω* 'I provide with a wreath' (*στέφανο-ς*) and *πεδάω* 'I furnish with a fetter' (*πέδη*) *τιμάω* 'I provide with honour' *τιμή*; compare particularly *στέφανω* (*στεφάνοις*) *στεφανόω* and *τιμῶ* (*τιμαῖς*) *τιμάω*.

A favourite meaning for *-ω* is factitive; as *σιφλόω* 'I make a cripple' (*σιφλό-ς*), *νέω* 'I make new' (*νέο-ς*), *ισόω* 'I make equal' (*ἴσο-ς*). This function it seems to have taken from pre-Greek *-αῖδ*; compare *νέω* with Lat. *novāre* O.H.G. *nīuwoñ* (p. 295); and in this sense *-ω* became enormously productive: *σαράσκω* 'I make into rags, tear to rags' from *ράκος* n. 'rag', *ύγιώω* 'I make well' from *ύγιής* 'well', *όρνιθόω* 'I turn into a bird' from *όρνις* 'bird', *πλατόω* 'I make broad' from *πλάτύ-ς* 'broad', *γεφυρόω* 'I make into a bridge' from *γέφυρα* 'bridge'.

(5) Beside verbs in *-υω* (§ 772) sprang up a class in *-ευω*, as *νομεύω* 'I am a herdsman' (*νομεύ-ς*), *ήνιοχεύω* 'I am a driver' (*ήνιοχεύ-ς*). If, as we assumed in III § 261 p. 162, *-ευσ* comes from *\*-εχv-ς*, then *-τινω* = *\*-εχv-λω*, *-ευσω* = *\*-εχv-σω* are quite regular, and do not differ in principle from *-v-(λ)ω* *-v-σω* (*δακρύω -δύω*).

The ending *-τινω* soon became a type for expressing one's usual calling or occupation: as *οἰνοχοεύω* 'I am cup-bearer' from *οἰνοχό-ς*, *μαντεύομαι* 'I am a seer' from *μάντι-ς*, *θηρεύω* 'I am a hunter' from *θήρᾱ* 'hunt', *βουλεύω* 'I am a counsellor, advise' from *βουλή* 'counsel'. Thus *-τινω* is partially synonymous with *-εω*; we have *οἰνοχοέω* and *-χοεύω*, and *κοιρανέω* bears the same kind of sense (see 2., p. 296).

1) One dare hardly derive this from *\*δακον-ιω*, although this would have an analogue in Lat. *fulgur-īd* (see § 775 p. 294).

(6) Amongst the many endings of verbs derived from substantives with consonantal stems, three are particularly fertile — *-αῖω*, *-ιῖω*, and *-αινω*.

(a) *-αῖω*, for *-αδ-ιω*, answers sometimes to a Germanic class in (Goth.) *-atja* (§ 768 p. 283), and sometimes *-αῖω* comes from *\*h₂d̥iō*, as in *πεμπάζομαι* 'I count by fives' from *πεμπάς* (II § 123 p. 390, III § 169 pp. 13 f.).

Following *μυγάζω* 'I mix', intr. in middle (*μυγᾶς* 'mixt') were coined *ἡσυχάζω* 'I pacify, keep quiet' from *ἡσυχος* 'quiet', *δοκιμάζω* 'I test' from *δόκιμος* 'tested, genuine, correct'. Following *ἀφροδισιάζω* 'I give myself up to sensuality' (*ἀφροδισιάς*), *γενειάζω* 'I grow a beard' (*γενειάς*) were formed *στασιάζω* 'I am in tumult' from *στάσις* 'tumult', *ἀνιάζω* 'I feel pain or trouble' from *ἀνία* 'pain, trouble', *ἐπιχωριάζω* 'I am at home' from *ἐπιχωρίοις* 'at home'.

*-ιῖω* for *-ιδ-ιω*; as *ἐλπίζω* 'I hope' from *ἐλπίς* *-ιδ-ος* 'hope', *φροντίζω* 'I think' from *φροντίς* 'care', *ληϊζομαι* 'I rob, harry, carry off' from *ληϊς* 'booty', *ἐρίζω* 'I strive' from *ἐρίς* 'strife'. On this model, *αἰνίζομαι* 'I praise' from *αἶνος* 'praise', *δειπνίζω* 'I entertain' from *δείπνον* 'meal', *καναχίζω* 'I roar, rush' from *καναχή* 'rush, roar', *ὀνειδίζω* 'I abuse, blame' from *ὀνειδος* n. 'disgrace', *ἀκοντίζω* 'I cast a javelin' from *ἄκων* 'javelin', *αἱματίζω* 'I stain with blood' from *αἷμα* 'blood', *μακαρίζω* 'I bless' from *μάκαρ* 'blest', *αἰκίζω* 'I insult, torment' from *αἰκῆς* 'shameful'.

In a few words *-αῖω* and *-ιῖω* come from *-αγ-ιω* and *-ιγ-ιω*; as *ἀρπάζω* 'I seize, carry off' (fut. *ἀρπάξω*) from *ἄρπαξ* 'greedy, piratical'; and *μαστιζω* 'I whip' from *μάστιξ* 'a whip'. This coincidence of *-γ-ιω* and *-δ-ιω* in the present caused analogy to act in two directions. (1) *ἀρπάσω ἤρπασα* beside *ἀρπάξω ἤρπαξα* following the dental stems; and (2) Dor. *δοκιμαξέω ἤριξα* instead of *\*δοκιμασέω ἤρισα* following guttural stems. The latter kind were very common in Doric.

(b) Verbs in *-αινω* come from two sources. Some are derived from nominal *n*-stems; as *τεκταίνω* 'I carpenter' from *τέκτων* 'carpenter', *εὐφραίνω* 'I make glad' from *εὐφρων* 'glad', *ποιμαίνω* 'I tend' from *ποιμήν* 'herdsman', *σπερμαίνω* 'I give

forth seed' from *σπέρμα* 'seed', *κῡμαίνω* 'I undulate' from *κῡμα* 'billow' (§ 768 p. 282). The others are extended *no*-stems; as *λαίνω* 'I quicken, make live' beside Skr. *iṣaṇa-t*, *αἰαίνω* 'I dry' beside Lith. *saũsinu* (§ 621 pp. 158 f., § 743 p. 266). As the *-αινω* group spread, either of the two kinds might serve as a type-form. Thus in making factitives from adj. *o*-stems, a large class, like *θερμαίνω* 'I warm' from *θερμός* 'warm', *λειαίνω* 'I smooth', from *λεῖος* 'smooth', *λευκαίνω* 'I whiten' from *λευκός* 'white', the model might be either *αὔαινω*, which was popularly derived from *αὔος* 'dry', or *εὐφραίνω* 'I gladden' (*εὐφρων*) and *πῑαίνω* 'I fatten' (*πῑων*).

§ 777. Italic. Denominatives from consonantal noun-stems, as Lat. *cantur-iō*, *dent-iō*, *comped-iō*, *custōd-iō*, *fulgur-iō*, in the present ran on parallel lines with primitives such as *farc-iō -i-s* (§ 702 p. 229, § 715 p. 248), and with denominatives from *i*-stems like *finiō (-i-s)* for *-i-īō*; with the latter this is true of the non-present stem, as *custōdītoi -ī-tus* like *finītoi -ītu-s*. The association seems to have gone thus far in proethnic Italic; for we have Osc. *καπίδιου*, i. e. *kapid-i-to-m* 'ollarium' (same stem as Lat. *capis -id-is*); compare Umbr. *statita* 'statuta' from *\*stati-* Gr. *στάσις*. Old participials such as Lat. *sceles-tu-s liber-tu-s* (II § 79 pp. 231 f., IV § 768 p. 283) had fallen out of the verbal system, thus becoming adjectives, before the beginnings of Latin.

The whole class of denominatives from consonantal noun-stems was dying out in Latin. Only those which ended in *-turiō* were a group of any size (see § 778. 1).

Of the forms used for the present in *scriptur-iō -i-s* etc., the only ones which are a regular outgrowth of the Indo-Germanic are the 1<sup>st</sup> sing. *-iō* and the 3<sup>rd</sup> pl. *-iunt*. The others cannot be derived either from *-iē-s -iē-ti -iō-mos -iē-tes* nor from *-iīe-s* etc.: to judge from the voc. *filie* (beside *filī*, III § 201 p. 83), we should expect as an imper. *\*scripturie*. As a fact, these denominatives dropt their *-iō -iē-s* and so forth simply because in Italic primary verbs conjugating *-iō -iē-s*

*-ie-ti* exchanged it for *-iō -ī-s -ī-ti* (§ 702 pp. 228 ff.) So *scriptur-iō* took its type from *suf-fiō farc-iō* etc. (§§ 716 f. pp. 249 f.), in the same way as Greek moulded the future *θερμανῶ ἀγγελῶ* upon the primary class (§ 757 p. 277).

What is seen in *scriptur-iō*, is seen in other verbs with *-iō*, as *finiō* from *fini-s*. Here, as before, only *-iō* and *-iunt* are regular. Here too the new forms sprang up in proethnic Italic; evidence for which is found in Umbr. *persnihi-mu* *persnih-mu* *persni-mu* 'precator' from a noun-stem *\*persni-* (§ 674 p. 207).

Again: verbs in *-ā-iō*, *-e-iō*, and *-u-iō* run parallel to the primary classes:

*plantō*, for *\*-ā-iō*, has the *iō*-suffix only in the 1<sup>st</sup> sing.; elsewhere unthematic *-ā-s -ā-t* etc., like *nō nā-s* etc., and *juvō -ā-s* etc. This agrees with Umbr. *furfant* *furfaθ* 'februant' *anstiplatu* 'instipulator' Osc. *faamat* 'habitat' and others, beside 1<sup>st</sup> sing. Umbr. *subocau* 'adoro' for *-ā(i)ō* (cp. *stahu* 'sto', and § 980); so the Latin type may be regarded as proethnic in Italy. See § 583 pp. 123 ff., § 738 p. 263.

So also with *claudēō*, for *\*-e-iō*, the *iō*-suffix is found only in the 1<sup>st</sup> sing.: *claudēō -ē-s* etc. like *pleō pl-ē-s* etc., *videō -ē-s* etc. (§ 590 pp. 131 f., § 738 p. 263). And the same is true of Causals, *moneō -ē-s* and so forth (§ 788). Two remarks may be made. First, *claudēō* and *moneō* orig. had *-ēiō*, while *pleō videō* had orig. *-ēiō* (cp. I § 612 p. 402). Secondly, *claudēs monēs -et -ētis* may be derived without violence from *-e(i)es -e(i)eti -e(i)etes*, as easily as Lesb. *φίλητε* may be derived from *φιλέ(ι)τε* (§ 589 p. 131). To judge from Lat. *trēs*, *pontēs* Umbr. *puntes* for *-e(i)es* (I § 134 p. 121), *ee* became *ē* in pre-Italic times. It is possible that this contraction in persons containing the suffix *-ie-* may have paved the way for the confluence of verbs in *-e-iō* and *-ē-iō* with those in *-ē-*. It must also be carefully remembered that Latin had no *ē*-forms answering to *plantāvī plantātu-s finīvī finitū-s*, as it had no similar *ē*-forms even in verbs with *-ē-iō*, such as *videō*.

Remark. An exception is *dēnsēō* 'I thicken', which has *dēnsētu-s*, a bye-form of *dēnsāre* (same meaning). It would appear that there was once nothing but this participle *dēnsētu-s*, and that the whole system *dēnsē-mus* etc., sprang up by analogy of *dēnsā-mus* to *dēnsā-tu-s*. This would explain why *dēnsēō*, unlike *albeō claudēō* etc., had a factitive meaning.

*statuō -uis -uit* etc. may be directly compared with Skr. *gātu-yāmi -yā-si* etc., Gr. *φῑτύνω -εις* etc.; on the other hand the inflexion is the same as in *suō suis suit* etc. (§ 717 p. 250).

§ 778. Particular endings becoming a type in Italic:

(1) The ending *-turiō*, occurring words like *scriptur-iō* from *scriptor* (§ 768 p. 282), was made by the usual misunderstanding into a type. Hence came a number of new forms, with the sense of will, wish, intention, often where there was no connected noun in *-tor*; as *parturiō tacituriō*, *sullaturiō* (from *Sulla*). In late Latin these words lost their distinctive meaning, and *parturiō*, for example, meant the same as *pariō*.<sup>1)</sup>

(2) The ending *-iō* = *-i-iō*, found in many Latin verbs from both subst. and adj. stems, gained no such distinctive meaning as did *-ō* (*-āre*) and *-eō*. Add to the exx. given in § 771 p. 289 the following: *partiō* and *-ior* 'I divide, share' from *pars* (stem *parti-*), *circumrētiō* 'I ensnare' from *rēte*, *ināniō* 'I empty' from *ināni-s*, *molliō* 'I soften' from *molli-s*. None the less did *-iō* spread by analogy: *catuliō* from *catulu-s*, *equiō* from *equo-s*, which with *nuptūire* remind us in form and sense of the Skr. desiderative class *putrīyá-ti* (§ 774 p. 292); *blandior* from *blandu-s*, *rauciō* from *raucu-s*, *saeviō* from *saevo-s*, *largior* from *largu-s*, *ūniō* from *ūnu-s*; *poeniō pūniō* from *poena*; *abortiō* from *abortu-s*, *singultiō* from *singultu-s*. It is possible that some of the verbs like *catuliō blandior* are the same formation as Skr. *adhvaryá-ti* Gr. *ἀγγέλλω*; see § 770 pp. 286 f.

(3) Verbs in *-ā-iō* (Lat. *-ō*), some of which, from *o*-stems, belong to pre-Italic times (§ 769 pp. 284 f.), became very numerous in Italic.

Many such, derived from *a*-substantives, meant 'to

1) Johansson (P.-B. Beitr. x 223) thinks that Goth. *aíhtērōn* 'to beg for' is a desiderative like these. He connects it with *aíh* 'I possess', and thinks the orig. meaning was 'I want to possess'.



occupy oneself with, to practise, use, produce' that which the original stem denoted: Lat. *cūrō* Umbr. *kuraia* 'curet' Pelign. *coisatens* 'curaverunt' (Lat. *cūra*), Lat. *multō* Osc. *moltaum* 'multare' (Lat. *multa*), Lat. *īnsidior* (*īnsidiae*), *praedor* (*praeda*), *lacrimō* (*lacrima*), *maculō* (*macula*), *fortūnō* (*fortūna*). Then verbs in *-āiō* were made from other substantive stems. Examples: Lat. *terminō* from *terminu-s termen*, Umbr. *termnas* 'terminatu-s' Osc. *teremnattens* 'terminaverunt'; Lat. *locō* from *locu-s*, Pelign. *locatin(s)* 'locaverunt'; Lat. *dōnō* from *dōnu-m*, Osc. *d]uunated* 'donavit'; Lat. *vinculō* from *vinculu-m*, Umbr. *previslatu* imper. 'praevinculato, praepedito vinculis'; Lat. *numerō* from *numeru-s*, *pāgnō* from *pāgnu-s* (cp. § 773 Rem. p. 291), *spolior* from *spoliu-m*, *cōnsilior* from *cōnsiliu-m*, *rēgnō* from *rēgnu-m*, *fluctuō* from *fluctu-s*, *tumultuō* from *tumultu-s*, *cōntiōnor* from *cōntiō*, *nōminō* from *nōmen*, *exāminō* from *exāmen*, *colōrō* from *color*, *fulgurō* from *fulgur*, *onerō* from *onus*, *scelerō* from *scelus*, *pulverō* from *pulvi-s*, *laudō* from *laus*, *hiemō* from *hiems*; Osc. *deivaid* 'iuret' *deivast* 'iurabit' from *deivo-* 'deus'.

A few more exx. may be given of verbs in *-āiō* derived from adjectival stems, like Lat. *novō* (pp. 284 f.): Lat. *privō* from *privō-s*, Osc. *preivatud* 'privato, reo' (for the meaning, cp. Bréal, Dict. etym. Lat.<sup>2</sup> 281, Mém. Soc. Ling. iv 394 f.); Lat. *piō* from *piu-s*, Umbr. *pihatu* 'piato' prupehast 'ante piabit'; Lat. *probō* from *probu-s*, Osc. *prufattens* 'probaverunt'. Hence by analogy Lat. *gravō* from *gravi-s*, *levō* from *levi-s*, *cicurō* from *cicur*. Lat. *sacrō* from *sacro-* *sacri-*, Osc. *sakarater* 'sacratu, sacrificatu' from *σάκρο* ('sacrum') *sacri-*.

A mass of Lat. verbs in *-tāiō* are based upon *to-* Participles; usually they have an intensive or frequentative meaning. The following seem to have existed in pre-Italic times: Lat. *gustō* = O.H.G. *costōm* from Idg. *\*gus-tó-*, see § 769 p. 284; Lat. *itō* Umbr. *etians* 'itent' *etato* 'itate' = Gr. *ἰτῆ-ρέοι* El. part. perf. act. *ἰτ-αυ-ιτᾶνώ*; Lat. *putō* 'I deck, prune, clean, reckon, think' beside O.C.Sl. *pytajā* 'scrutor, quaero, indago' (Osthoff, M. U. iv 86 f.). Formed in Latin on the same

principle: *hortor occultō adjūtō cantō versō tractō dictō gestō pōtō, domitō crepitō habitō*. The ending *-itō* was abstracted from words which happened to have it, and became a type; hence *vocitō* from *vocō* (*vocātu-s*), *volitō* from *volō* (*volātu-m*), *agitō* from *agō*, *scīscitō* from *scī-scō*, *vīsitō* from *vīsō* (Class XX, § 662 p. 197); and, by a combination of *-itō* with *-tō*, arose intensives or frequentatives to the second power, as *ititō* from *i-tō*, *dīctitō* from *dīc-tō*, *cursitō* from *cursō*.

The reason why this class derived from the *to*-participle increased to such a size, was that from the pre-Italic stage onwards, the neuter or the feminine of these participles was used as an abstract noun: as *commentu-m* 'idea' (hence *commentor*), *repulsa* 'defeat' (hence *repulsō*), *offēnsa* 'blow' (hence *offēnsō*). See II § 158 pp. 473 ff., IV § 769 p. 285.

*-igare* also became a fertile denominative suffix in Latin; *nāvīgō rēmīgō jūrīgō jūrgō mītīgō*. Cp. Leo Meyer, Bezz. Beitr. VI 130 ff.

(4) The *-eō* = *-e-īō*, of intrans. verbs like *claudēō* (§ 770 p. 288), hardly touched any but *o*-stems; but an example of it elsewhere is *molleō* from *molli-s*.

Observe that the same distinction of transitive and intransitive, which we see in the denominatives *clarāre* and *clarēre*, is seen in primary verbs with those endings, as *liquāre* and *liquēre*.

Remark. *fateor* seems to be another denominative in *eō*. Of this verb, Oscan has the inf. *fatium* (*i* = *ē*). The contained stem is *\*fa-to-s*, answering to Gr. *φηρό-*; 'said' (*ē-φατο-*), and meaning 'having declared something, open, confessing'; and the word doubtless borrowed its deponent inflexion from *fārī* (§ 495 p. 56). At first its construction was *fateor dē aliquā rē*, and the accusative constr. came later. The partic. *fessu-s* follows *suāsu-s* from *suādeō*, and the like.

§ 779. Keltic. The only distinct class of this kind in Irish contains the *a*-denominatives, as *rannaim* from the *a*-stem *rann* (§ 769 p. 284) and *marbaim* from the *o*-stem *marb* (p. 284). Somewhat as in Latin, the 1<sup>st</sup> sing. only is extended by *-īō*, and all the rest lacks it: 1<sup>st</sup> sing. *no charu* for *\*cara-īō*

(conjunct inflexion) like Lat. *plantō*; 3<sup>rd</sup> sing. *no chara* O.Bret. *cospitio-t* like Lat. *planta-t*. Compare § 584 p. 125.

*io*-presents from consonantal stems (like Skr. *apas-yá-ti*) there are none. Mid.Ir. *ath-rīgaim* 'I dethrone' is an *ā*-verb (inf. *aith-rīgad*) from *rī* 'king' (stem *rīg-*).

There are none either of the type of Skr. *gātu-yá-ti* (§ 772 p. 289).

In the Keltic 3<sup>rd</sup> conjugation, Idg. denominatives in *-e-īō* (say *scorim scuirim*, § 770 p. 288), those in *-i-īō* (say *fo-dalim* § 771 p. 289), and causals in *-eīō* (§ 803) have all run together. Then this new composite denominative type spreads by analogy: 3<sup>rd</sup> sing. *ad-rīmi* 'counts' from *rīm* f. 'number' (stem *\*rīmā-*), *bagim ar-bagim* 'I strive, brag' from *bāg* f. 'strife' (stem *\*bagā-*).

§ 780. A denominative ending with *-ag-* became widespread in Irish and British dialects: e. g. O.Ir. *sāraigim* or *-sāraigimur* Mod. Cymr. *sarhāf* (= O.Cymr. *\*sarhagam*) 'I injure, offend' from *sār* 'offence', O.Ir. *suidigim* 'I place' from *suide* 'place', Mid.Ir. *intamlaigim* 'I compare' from *intamail* 'likeness, imitation', O.Cymr. *scamnehgirt* 'levant'. Some have wished to connect this suffix with the nominal suffix *-āco-* (II § 89 p. 273), led to this view by *cumachtaigim* 'I make myself master of' from *cumachtach* 'powerful'; but nothing clear is known about its origin.

Remark. "The British dialects point to *-āg-*, and before the *ā* Cymr. has an *h*, which I believe to indicate that the orig. sound was *s* (i. e. *-sāgi-*). But of this *s* there is no trace at all in Irish. Leaving this out of count, we might imagine some formation like Lat. *rēmigiāre pūrgāre*, only with *i*-flexion in Keltic." Thurneysen.

§ 781. Germanic. (1) Here, as in Keltic, the most prominent group consists of *ā*-verbs, with inf. Goth. O.H.G. *-ōn* O.Iccl. *-a* A.S. *-ian*, called in Germanic grammars the Second Weak Conjugation. *-ā-īō-*, with *-īō*-extension, is clear only in Anglo-Frisian, A.S. 1<sup>st</sup> sing. in *-ie*, pl. in *-iað*, as *sealfie sealfiað*, where *i* must originally have been a long and also dull vowel, so that Germ. *-ō-īā-* is quite out of the question. Without *-īō-*: O.H.G. *salbōm -ōs -ōt -ōmēs -ōt -ōnt* Goth. *salbōs -ōþ -ōm -ōþ*

-ōnd. The 1<sup>st</sup> sing. Goth. *salbō* is doubtless not for \*-ā-m with secondary personal ending (neither is *hab-a* for \*-ē-m, see § 708 p. 239), but a new formation following *batra* beside *batram* and *haba* beside *habam*. Compare § 739 p. 264.

Examples of ā-verbs derived from ā-nouns are given in § 769 p. 284. Others are Goth. *fairinō* 'I accuse, blame' O.H.G. *firinōm* 'scelero' A.S. *fírenie* 'I sin' from Goth. *fafrina* 'accusation' O.H.G. *firina* 'scelus' A.S. *fíren* 'sin', Goth. *idreigō* 'I repent' from *idreiga* 'repentance', O.H.G. *ahtōm* (A.S. *eahtie*) 'I notice' from *ahta* 'notice', O.H.G. *gremizzōm* 'I look grim, am gloomy' from *gremizza* 'dark look, gloom, despondency'. The ending -inō-(ja-), beginning in West Germ. verbs like O.H.G. *firinōm*, *redinōm* ('I set forth, recount', from *redina* 'account, description') became an independent suffix and went further: e. g. O.H.G. *wīz-inōm* 'I punish' A.S. *wītnie*, O.H.G. *fest-inōm* 'I affirm, make fast, promise' A.S. *fæstnie*, O.H.G. *heb-inōm* 'I entertain as a guest', and others.

For ā-verbs from o-nouns, such as Goth. *vairþō* O.H.G. *werdōm*, see § 769 p. 284.

ā-verbs from s-stems (these joined the o-declension very early in Germanic, see II § 132 pp. 419 f.): Goth. *hatizō* 'I hate' from *hatis* 'hatred', O.H.G. *sigirōm* 'I conquer' beside Goth. *sigis* 'victory', O.H.G. *egisōm* 'I am terrified' beside Goth. *agis* 'fear', like Lat. *onerāre scelerāre* (§ 778 p. 302). -isō-(ja-) became a new independent suffix: Goth. *valþ-isō* 'I roll, revolve', O.H.G. *rīch-isōm* 'I rule' A.S. *rīcsie*, O.H.G. *līch-isōm* 'comparo, simulo' *hēr-isōm* 'I rule' (also *hērrisōm* by analogy of *hērro* 'lord, ruler', which was originally a comparative), A.S. *bledsie* 'I bless' and others.

ā-verbs from n-stems: Goth. *fráujinō* 'I am lord, I rule' from *fráuja* (gen. *fráujins*) 'lord', *gudjinō* 'I am a priest, fill priestly office' from *gudja* 'priest', which gave the type for *reik-inō* 'I rule over' (*reik-s* 'ruler') *skalk-inō* 'I am a servant, am useful' (*skalk-s* 'servant') *hōr-inō* 'I commit adultery' (*hōr-s* 'adulterer').

Many more new endings with the ā-suffix, like these just

mentioned, are found in West Germanic. The favourites are *-arō-*, *-alō-*, and *-akō-*.

(2) Even in the prehistoric stages of Germanic three classes of verbs, with endings originally different, came to have the same ending; those with consonantal stems, with the ending *-iō* (*-iīō*); those from *o*-stems, with the ending *-e-iō* (whence pr. Germ. *-i-iō*), and those ending in *-i-iō*. Compare Goth. *riqizja glitmunja veitvōdja lauhatja* O.H.G. *lougazzu lohazzu* and others § 768 p. 283, Goth. *rigneiþ* etc. § 770 p. 288, and Goth. *dāilja* O.H.G. *teil(i)u*, Goth. *vēnja* O.H.G. *wān(i)u* etc. § 771 p. 289.<sup>1)</sup> Besides, the causals in *-éiō* (pr. Germ. *-i-iō*), as Goth. *fra-vardja* = Idg. *\*uortéiō*, fell into this conjugation, which is called the First Weak Conjugation in Germanic grammar. It should be mentioned that in Germanic, as in other Idg. languages, many verbs derived from nouns are properly classed among Causals; for example, Goth. *hāilja* O.Sax. *hēliu* O.H.G. *heil(i)u* 'I heal' from *hail-s hēl heil* 'whole' (§§ 793, 806).

But the confluence of the various pre-Germanic conjugations was not always due to regular sound-change. For instance, Goth. *glitmuneiþ lauhateiþ* (both only inferred) took the place of *\*glitmun-ji-þ \*lauhat-ji-þ* on the analogy of such forms as *rigneiþ* for *\*rigni-ii-ā(i)*. Goth. *vaurkeiþ* (1<sup>st</sup> sing. *vaurkja* Idg. *\*uṛg-iō*) is a new form, instead of *\*vaurkiþ*, following *fra-vardeiþ* etc. (p. 229 footnote). On the other hand, O.H.G. *denit beizit* (1<sup>st</sup> sing. *denn(i)u beizz(i)u* ground-form *\*tonéiō \*bhoiǵéiō*) follow *hevit* = Lat. *capit*.

There is often wavering between the first weak conjugation and the second, the *ā*-verbs. Sometimes there were originally variant forms with different structure; e. g. O.H.G. *follōm* 'I fill' was a pre-Germ. verb in *-a-iō* (§ 769 p. 284), whilst *full(i)u* Goth. *fullja* 'I fill' is a causal; similarly we have O.H.G. *tarōm* 'I hurt, injure' from *tara* 'hurt, injury' beside the causal

1) Whether *\*-u-iō* leads regularly to Goth. *-ja*, and say *tagrja* 'I cry' comes from pr. Germ. *\*tagru-iō*, *ufarassja* 'I exist in abundance' for *\*ufarassu-iō*, is doubtful.

*teriu* (same meaning). How far these verbs altered their inflexion in later times, and for what reasons, are questions which need further investigation (cp. for instance O.Sax. *fullōn* beside *fulliu*).

(3) Verbs in Goth. *-a* (2<sup>nd</sup> sing. *-áis*) O.H.G. *-ēm*, as Goth. *þaha* O.H.G. *dagēm* 'taceo' (Third Weak Conj.), as we have seen in § 587 p. 129, § 592 p. 133, § 708 pp. 238 ff., did not originally belong to what we have called the later stratum of denominatives. However, we do find in Germanic quite a number of later denominatives in this conjugation; as Goth. *arma* 'I feel pity' *fasta* O.H.G. *fastēm* 'I fast'; and one is tempted to class those verbs along with Latin denominatives such as *claudeo*, which were just in the same way associated in conjugation with *taceo* *video* and the like (§ 777 p. 300). Howbeit, this is inadmissible. Because by far the greater number of the verbs in this class were intransitive (as are *þaha dagēm*), it happened that their ending became a sign of intransitive meaning; and as the orig. inceptive verbs with an *n*-suffix (as Goth. *ga-vakna* 'to awake') suggested inceptive *n*-verbs formed from nouns (as Goth. *fullna* 'I get full' *mikilna* 'I grow large', § 623 p. 160), just so *þaha dagēm* were the model for *fasta fastēm* and many others. Since there was a primary verb Goth. *saurga* O.H.G. *sorgēm* 'I care' side by side with the subst. Goth. *saurga* O.H.G. *sorga* 'care', which seemed to be derived from that substantive (§ 659 pp. 193 f.), so the subst. (O.H.G.) *fasta* 'a fast' suggested the above named verb Goth. *fasta* O.H.G. *fastēm*; and furthermore the verb *vernēm* 'I perplex or torment myself' was made to complement *verna* 'perplexity, pang', *wartēm* 'I watch, wait' was formed from the subst. *warta* 'watch, spying, waiting', *wahtēm* 'I keep watch' from *wahta* 'watch'. In O.H.G. the process goes a step further, and verbs like these are derived from adjectives; e. g. O.H.G. *fālēm* 'I cause to rot' from *fāl* 'rotten', *altēm* 'I grow old' from *alt* 'old'. Compare some other verbs, belonging to Class XIV, such as O.H.G. *wesanēm* 'I dry up, wither away' (O.Icel. *visna*), *trunkanēm* 'I get drunk' (A.S. *druncnie*), which, by adopting *ē*-flexion, gained a second sign of their intransitive-

inceptive meaning (§ 623 p. 160); and further Goth. *maúrna* O.H.G. *mornēm* instead of *\*maurnō* *\*mornōm* (§ 605 p. 147).

There are many and various waverings between *-ē-* and *-ā-*flexion, as O.H.G. *ērēm* and *ērōm* 'I honour', which need further investigation.

### § 782. Balto-Slavonic.

(1) Here it is no longer possible to distinguish beyond a doubt verbs derived from consonantal noun-stems and containing the suffix *-iō-*, of the type of Skr. *rajas-yá-ti* (§ 768 p. 282). Instead of these, we find in cases where the forms are clear, verbs conjugated in other denominative classes; as Lith. *akmenyjū-s* 'I turn to stone' from *akmū* 'stone' (stem *akmen-*), O.C.Sl. *znamenaję* 'I mark, term' from *znamę* 'mark' (stem *znamen-*).

Remark. Perhaps the Lith.-Lettic verbs Kurschat calls "Punctiva" — those ending in (Lith.) *-terėti* *-telėti*, as *kiřsterė-ti* 'I rough-hew a little' — are to be connected with Slavonic *nomina agentis* in *-tel-* (Idg. *-ter-*), as *hr̥tel-i* 'offerer' (II § 122 p. 389). Then comes the question whether the Lith. present formation *kiřster-iu* *szvilptelu* (i. e. *-el-iu*) represents or not the type of Skr. *rajas-yá-ti*. The conjugation in the dialects is sometimes *-terėjau* *-telėjau*, *-terėti* *-telėti*, and sometimes *-teriau* *-telau*, *-terti* *-telti* (Leskien-Brugmann, Lit. Volksl. und Märchen, 313 f.), the latter like *lūkuriu* *lūkurti* beside *lūkurii* 'I wait quietly'.

(2) Beside the endings Lith. *-o-jū* O.C.Sl. *-a-ję* = Idg. *-a-iō*, as Lith. *lankó-ju* O.C.Sl. *laka-ję* (§ 769 p. 284), we meet with Lith. *-ė-ju* O.C.Sl. *-ě-ję* instead of Idg. *-e-iō*, e. g. Lith. *gūdė-jū-s* O.C.Sl. *razumě-ję* (§ 770 p. 288), and Lith. *-y-ja* instead of Idg. *-i-iō*, as *daly-jū* (§ 771 p. 289). In these formations the long *-ē-* and *-i-* are to be explained on the same principle as the long vowels in the Greek dialectic forms *ἀδινῆω* *κονῶω* and so forth (§ 775 p. 293): they have been imported from the non-present stems; thus *gūdė-jū-s* follows *-ė-siu* *-ė-ti-s*, *razumě-ję* follows *-ě-chū* *-ě-ti*, and *daly-jū* follows *-ý-siu* *-ý-ti*, and so forth. At the same time, something is due to such present forms as Lith. *byrė-ju* O.C.Sl. *gově-ję*, in which verbs the non-present forms had the same endings as have the present stems now in question (e. g. *byrė-ti* like *gūdė-ti-s*, *gově-ti* like *razumě-ti*); see § 735 p. 262, § 740 pp. 264 f.

Similarly sprang up the present in *-ā-ju*, as *jākū'-ju*, by analogy of *-ā-ta-s* (§ 773 p. 291), due to the same principle as the Boeotian *δαμνῶντες* (§ 775 p. 293). This happened first in Baltic, or at any rate in the proethnic stage of Balto-Slavonic. The preterite of these verbs is odd; it ends in *-avau* (*jākavaū*), while we should expect *\*-ā-jau*; the latter ending appears in Lettic as *-āju*, the shape it would naturally take there. I assume, with Wiedemann (Lit. Prät., 198), that *-avau* is due to the analogy of verbs in *-au-ti* (pres. *-au-ju* pret. *-avau*, see below, 3).

In Slavonic, where Idg. *ō* and *ā* ran together, verbs of the same kind as Lith. *jākū'ju* may be buried in the class which has the termination *-ajā*. This is all the more likely because such forms as *rogatū* and *ragū'ta-s* cannot be well separated (§ 773 p. 291).

(3) The denominative type exemplified by such forms as Skr. *adhvar-yá-ti* (from *adhva-rá-s*) and Gr. *ἀγγέλλω* (from *ἄγγελος*) is represented, firstly, by Slavonic presents like *trepěštā* 2<sup>nd</sup> sing. *-ešteši* (from *trepetū*). See § 770 p. 287.

Secondly, Lithuanian denominatives in *-auju* (inf. *-au-ti*, pret. *-avau*), and those in Slavonic ending in *-u-jā* (inf. *-ova-ti*), have to be examined; e. g. Lith. *rėkau-ju* 'I make a noise' O.C.Sl. *dlūgu-jā* 'I owe'. They come from the most diverse noun-stems, but it is impossible to tell offhand with what stems the class began. If they are derived from *u*-stems (*dlūgovati* from *dlūgū* 'debt' gen. *dlūgu*, *sladovati* 'to be sweet' beside *sladū-kū* Lith. *saldū-s*), they must be connected with Idg. verbs in *\*-u-ǵō* (§ 772 p. 289). But if so, one cannot understand why the stem-final *-u-* should have been exchanged in the verb for the strong grade *-e-* or *-o-* (pr. Balto-Slav. *-o-* may be either, see I § 68 p. 59). I therefore think it far more likely that the contained nouns had stems in *-e-uo-* *-e-uā-* (cp. Skr. *kēśa-vā-s* 'longhaired' from *kēśa-s* 'hair', etc., see II § 64 pp. 133 ff.). This view is supported by Slav. *běsovati* 'to be frenzied' beside *běsovū* 'devilish, mad' from *běsū* 'demon',



*kraljevati* 'to be king' beside *kraljevū* 'royal' from *kraljī* 'king', *vračevati* 'to be a physician, to heal' beside *vračevū* 'pertaining to a physician' from *vračī* 'physician', *vinovati* 'to accuse' beside *vinovīnū* 'guilty of something' from *vina* 'cause, guilt' (*vinovīnū* presupposes \**vinovū*), and many more; Lith. substantives in *-ava -java* are collected by Leskien, *Die Bildung der Nomina im Lit.*, 199 ff. In Lettic (and Prussian too) the verbs in *-auti* do not appear at all; and partly for that reason, partly because the large majority of Lith. verbs in *-auti* are Slavonic in origin, it is at least not improbable that this *au*-conjugation has been borrowed bodily from the Slavonic. However, the borrowing must have taken place very early, when Slav. *ū* was still *ou*.

Genuine Baltic examples of the type of Skr. *adhvar-yá-ti* would therefore be impossible to find.

(4) Side by side with the ending *-ō-ju*, Baltic has another present inflexion with *-a-* and without *-jo-*. This occurs, firstly, in the 2<sup>nd</sup> sing. imper. always without exception; e. g. *dovanó-k*, which is to be compared with Lat. *planta* etc. (§ 957). Secondly, in Frequentatives and Causals with *-au* (inf. *-y-ti*), some of which were certainly derived from nouns; e. g. Lith. *jū'stau* 'I gird (frequently)' from *jū'sta* 'girdle', *peñnaū* 'I earn' from *peñna-s* 'earnings', *vėtau* 'I fan, winnow' beside Skr. *vā-ta-s* Gr. *ἀν-τη* (II § 79 p. 223). The forms *jū'sto jū'sto-me jū'sto-te* answer to Lat. *planta-t -a-mas -a-tis* Lesb. *ῥῖμα-μεν* O.Ir. *no chara-m* Goth. *salbō-m* etc., but the 1<sup>st</sup> and 2<sup>nd</sup> sing. *jū'stau jū'stai* show the same analogical change as do the primary forms *bijaū-s* 'I fear' *buvaū* 'I was', see § 586 p. 127. This Lith. present class, as the non-present forms show (inf. *jū'sty-ti* pret. *jū'scziau*), stands in very close connexion with the Idg. verbs in *-éjō* (Class XXXII), and we must discuss it again in §§ 789 and 807.

The orig. *a*-flexion without *-jo-* is also seen in Pruss. *waitia* 'he speaks' 1<sup>st</sup> pl. *waitiā-mai* (inf. *waitiā-t*) beside O.C.Sl. *věsta-ja* 'I speak, advise' (inf. *věsta-ti*), beside Pruss. *caria-woyti-s* *karige-wayte* 'address to the army, review' O.C.Sl. *věšte* n. advice'.

(5) Slavonic has no distinct present class to correspond to the Lith. present class *-y-ju* (*daly-jù*, no. 2, p. 308) which represents the Idg. verbs in *-i-ǵō*. These verbs in *-i-ǵō* in this branch of Idg. were merged in the class of Causals etc. with *-i-ti* (Class XXXII); e. g. *goštq* 'I entertain, receive hospitably' 2<sup>nd</sup> sing. *gosti-ši* inf. *gosti-ti* from *gostǵ* 'guest', *čīštq* 'I honour' from *čīstǵ* 'honour', *mīštq* 'I take vengeance' from *mīstǵ* 'vengeance', *branjq* 'I strive' from *branǵ* 'strife', *mysljq* 'I think' from *myslǵ* 'thought'. The Idg. endings *-éǵō* and *-i-ǵō* in Slavonic were sure to run together after *-ei-* became *-ǵj-* (I § 68 p. 60), and in both classes the endings *-jq* *-iši* *-itū* etc. have undoubtedly taken *-ī-* from the infinitive. We shall see in § 789 p. 322 how very probable it is that *-ī-* first got into the Causals, and afterwards spread to *i*-denominatives.

§ 783. Certain endings of the denominative verbs become types.

(1) Verbs in (Lith.) *-ō-ju* (O.C.Sl.) *-a-jq* from *a-* and from *o*-stems; as Lith. *lanko-ju* O.C.Sl. *lāka-jq* from *lankà lāka* and Lith. *kilnō-ju* from *kilna-s*, *mīrksnio-ju* from *mīrksni-s*, O.C.Sl. *prija-jq* beside Skr. *priyā-s*, are cited in § 769 pp. 284 f.

Other Baltic examples are: Lith. *klūpo-ju* 'I continue kneeling' from *klūpa* 'kneeling, curtsey', *dārgano-ja* 'it is rainy weather', from *dārgana* 'rainy weather', Lett. *jaudā-ju* 'I have power, I can' from *jauda* 'power', *sukkā-ju* 'I comb' from *sukkas* pl. 'comb', *schāulā-ju* 'I flutter', from *schāul-s* 'fluttering', *wājā-ju* 'I weaken' from *wāj-sch* 'weak', *jōkā-ju* 'I jest' from *jōk-s* 'jest', Lith. *valō-ju* (i. e. *\*valiō-ju*) 'I compel' from *valà* (i. e. *\*valià*) 'will', *vadžio-ju* 'I lead about' from *vādžios* pl. 'leading-string, leash', *gylō-ju* 'I prick repeatedly' from *gylỹ-s* 'sting', *vynio-ju* 'I wrap up' beside *kakla-vynỹ-s* 'necktie'; also derived from *-ǵē*-stems, as Lith. *pāinio-ju* 'I confuse, entangle' from *pāinė* 'a confusion, entanglement, hindrance', *rānkio-ju* 'I keep picking up' (berries, for example) from *rankė* 'a gleaning or gathering'. The predominant meaning of Lith. verbs in *-oju* is 'to do, to

be occupied with' the thing denoted by the noun whence the verb comes, as *dovanó-ju* 'I make a present to some one'; and it is easy to see that where there was any verb of this sort and a primary verb containing the same stem, the former might get some kind of frequentative meaning by way of distinction. Thus *lanko-ju* 'I busy myself with bending' means practically 'I bend to and fro' to make pliant or supple, whilst *lenkù* means simply 'I bend'. We shall soon meet this same Frequentative class in Slavonic; and we may therefore with some probability infer that it belongs to the proethnic period of Balto-Slavonic. But I would suggest that the type is still older, and was not produced at that time out of the later stratum of denominatives; for there is no objection to comparing forms like Lith. *lindo-ju* O.C.Sl. *sün-ědaja* with Lat. *juvāre* Goth. *mitōn* etc., and placing them in the older denominative stratum. See §§ 734 ff. pp. 261 ff.

The ending *-joju*, both with and without some part of the foregoing stem adhering to it, became an independent suffix. Alone: *lankioju* beside *lanko-ju*, *brádžio-ju* 'I wade about' from *bradā* 'a wading' (but Lett. has *braddāju*) *lándžioju* 'I crawl about' beside *l-landa* 'place to crawl into' (but Lett. has *lōdāju*), *lakioju* 'I fly about' from *lakā* 'place to fly in and out of, entrance to a beehive', *sakioju* 'I follow', *sagioju* 'I attach, fix, sew on'. *-loju* (i. e. *\*-ljoju*): *pirszlōju* 'I woo, am a suitor on behalf of some one' from *pirslj-s* 'suitor, wooer' (*perszū pirsti* 'to woo, to be suitor'), *mirkloju* 'I blink' from *mirklj-s* 'blinker' (*mérkiu mérkti* 'I close my eyelids') and others; by analogy of these *žirg-lōju* 'I go straddling about' (*žergiū* 'I step, stride'), *tep-lōju* 'I smear or grease over' (*tepū* 'I smear'), *mēt-lōju* 'I throw about' (*metū* 'I throw' *mētau* 'I throw about'). *-czioju* *-szczioju*: *badmirszczioju* 'I almost starve, suffer hunger' from *badmirtē* 'starvation', and others; which set the type for such forms as *mirk-czioju* *mirk-szczioju* 'I blink', *trūk-czioju* *trūk-szczioju* 'I throb repeatedly', *ráis-szczioju* 'I keep tying'. *-urioju* *-uloju* (with parallel endings *-uriūju* *-ulūju* by § 785) for frequentatives: *výburioju* 'I wag my tail, fawn upon' from

*vyburŷ-s* 'one who wags the tail', *krūtuloju* 'I stir myself a little' from *krūtuli-s* 'a stirring of oneself, levy, militia', *grōmuloju* 'I chew the cud' from *gromulŷ-s* 'cud', etc.; by this analogy *kŷb-urioju* 'I kick or struggle a little', *vōb-uloju* 'I chew something tough'. *-aloju* is used in the same way; in this ending *-ioju* interchanges with *-iūju* far oftener than in the endings *-urioju -uloju* (§ 785):<sup>1)</sup> *sārgaloju* 'I am sickly' cp. *sargal-inga-s* 'sickly', *darbaloju* 'I keep on working, I work vigorously', *isz-vartaloju* 'I tumble down' and many more, Lett. *pirkalāju* 'I buy by retail' beside Lith. *pirkala-s* 'wares', cp. Lith. *svāmbalāju* 'I dangle' from *svāmbala-s* 'that which dangles, plummet'.

Other Slavonic examples (observe that some of the Slav. verbs in *-a-ti* may possibly answer to Lith. verbs in *-ū-ti*, see § 782. 2 p. 309): O.C.Sl. *igra-jā* 'I play' from *igra* 'game', *sū-vraska-jā* 'I am wrinkled' from *vraska* 'wrinkle', *klevata-jā* 'I calumniate' (beside *kleveštā*, see § 770 p. 287) from *kleveta* 'slander', *gněva-jā se* 'I am angry' from *gněvŷ* 'anger', *kašŷlja-jā* 'I cough' from *kašŷlŷ* 'cough'. As in Baltic, these verbs were distinguished by a secondary frequentative meaning from parallel primary verbs. They were associated with the group of frequentatives derived from verbs, whose beginnings go back to the older denominative *a*-series; thus *-ēda-jā* was associated with *ja(d)-mŷ* 'esse', *-črŷpa-jā* with *črŷpa* 'I make', *-gněta-jā* with *gnetā* 'I press', *čŷta-jā* 'I read' with *čŷtā* 'I count, reckon'; some of these could also be conjugated in the present like *glagoljā* (*glagola-ti*) *trepeštā* (*trepetā-ti*), etc. (§ 770 p. 287), as *na-ričā* 'I name' (inf. *na-rica-ti*) beside *na-rekā*. As some of these frequentatives had originally a strong grade of root-vowel, it became a rule for new forms of the same model, that if the primary verb had the vowels *e*, *o*, *ŷ*, or *ŷ*, the frequentative had *ē*, *a*, *i*, or *y* (see the comparisons in Leskien's *Handbuch*, pp. 14 f.).

1) The distinction between *o* and *ū* is in many Lith. writings so incompletely kept, that it is often impossible to say whether an ending be *-oju* or *-ūju*.

In vowel-stems, *-vaja* is found as a frequentative suffix; e. g. *o-ba-vaja* 'incanto' beside *ba-ja* 'fabulor', *o-dē-vaja* 'I clothe' beside *dē-ja* *dežda* 'I lay', *pi-vaja* 'I drink' beside *pi-ja* 'I drink'; *o-kleveta-vaja* beside *kleveta-ja* *kleveštā* 'I slander', *razumē-vaja* beside *razumē-ja* 'I understand'. The origin of *-vaja* was the noun-suffix *-uo-* *-uā-*: *piva-ja* from *pi-vo* 'a draught', *vū-liva-ja* 'I pour in' (beside *bi-ja* 'I pour') from \**li-vū* Mod.Slov. *liv* 'funnel' *na-liv* 'shower of rain' Russ. *na-livū* 'the time when the corn grows full' *pro-livū* 'strait, channel', *na-sēva-ja* 'I sow' a field (beside *sē-ja* 'I sow') from Russ. *sē-vū* 'sowing, seed time'. Other similar nouns having *v*-suffixes may be regarded as derivatives with the suffixes *-ūkū* *-ūka*: cp. O.C.Sl. *pri-dē-v-ūkū* 'cognomen' Mod.Slav. *o-dē-v-ka* 'dress' beside *-dēvaja*, Russ. *do-bi-v-ka* 'a complete driving in' (of stakes) beside *raz-bivaja* 'I knock to bits, destroy' (*bi-ja* 'I strike'), Mod.Slov. *po-mi-v-ek* 'rinsing pail' beside *u-myvaja* 'I wash' (*my-ja* 'I wash'). But the *v* of *davaja* 'I give' and of *stavaja* 'consisto' may be taken as original, even if it is not to be put in just the same category as the *u*-suffix of the aforementioned forms; cp. Lith. *dovanā*, Skr. *dāvānē* and O.C.Sl. *stava stavū po-stavū stavlja* = Goth. *stōja*, Lith. *stovā*. Since *piva-ti* *dava-ti* were regarded as intimately connected with *pi-ti* and *da-ti*, the ending *-vati* became itself a type, and hence we have *-znava-ti* beside *zna-ti* 'knows', *-klevetava-ti* beside *klevata-ti*, and so on. The endings *-vaja* *-vati* were very convenient for making frequentatives from verbs with a vowel stem-final; hence their frequency.

Remark. Frequentatives of derivative verbs, as *o-kleretavati* *razumēvati* *reličavati*, must be regarded, because of their meaning, as an imitation of primary Frequentatives, and must not be derived from nouns in *-avū* and *-ēvū* (such as *reličavū* 'grandiloquent').

§ 784. (2) Verbs from *o*-nouns in (Lith.) *-ē-ju* (O.C.Sl.) *-ē-ja*, as Lith. *gūdē-jū-s* from *gūdu-s*, O.C.Sl. *razumē-ja* from *razumū*, are cited in § 770 pp. 288 f.

Other Baltic examples are: Lith. *szyksztē-ju* 'I am covetous' from *szykszta-s* 'covetous', Lett. *labbē-ju* 'I better

myself' from *lab-s* 'good', *prátē-ju* 'I subtilize, play the wiseacre' from *prát-s* 'reason', *galē-ju* 'I finish' from *gál-s* 'end', *mistrē-ju* 'I mix, mingle' from *mistr-s* 'hotch-potch'. In Lithuanian these verbs mean 'to be or practise' anything. They are formed from other stems besides those in *-o-*, as Lith. *žygē-ju* 'I go an errand' from *žygi-s* 'errand, course', *malonēju* 'I much wish to have' from *malonù-s* 'gracious', *seilēju* 'I slaver, drive' from *séilē* 'slaver', Lett. *bridēju* 'I delay' from *bridi-s* 'while, period', *aurēju* 'I blow the hunting horn' from *aure* 'hunting horn'. They are linked with the older group of Verbs in *-ēju*, as *kylē-ju* (§ 740 p. 265), in the same way as verbs like *dovanóju* are linked with those like *lindoju* (§ 783 p. 312).

In Lithuanian the ending *-inėju* was converted into a new type for Frequentatives. First came verbs like *tekinē-ju* 'I run about a little' from *tēkina-s* 'running', *dilbinē-ju* 'I glower, glare from beneath my brows' from *dilbina-s* 'one who glowers'. The next step was *smil-inēju* 'I keep eating dainties, picking and tasting', *lind-inēju* 'I crawl about', *vag-inēju* 'I filch' and others. Verbs already frequentative often add *-inėju*, and thus form a frequentative of the second power, so to say; thus we have *laist-inēju* from *laistau* *laistyti* 'to pour repeatedly', itself frequentative of *lė-ti* 'to pour', *žarg-inēju* from *žargaũ* *žargyti* 'to straddle or stretch the legs repeatedly', freq. of *žėrk-ti* 'to spread the legs'; ep. *pilst-aloju* 'to pour, shed or drop repeatedly' from *pilstau* *pilstyti* freq. of *pil-ti* 'to pour, shed' (§ 783 p. 313).

Other examples from Slavonic, where almost all verbs in *-ěja* are intransitive and most of them mean to get into some condition: *o-slabě-ja* 'I get weak' from *slabũ* 'weak', *o-malě-ja* 'to get little' from *malũ* 'little', *buja-ja* 'I get daft' from *bujĩ* 'daft', *obũ-ništa-ja* 'I get poor' from *ništĩ* 'poor', *o-krilě-ja* 'I wing myself' from *krilo* 'wing'; *vũz-ma-žaja* 'I make a man of myself, take courage' from *mažĩ* 'man'. These too can be formed from other besides *o*-stems, as *želěja* 'I wish' from *želja* 'wish, longing'.

*-lěja* as an independent suffix. On the analogy of

*o-mūdīlē-jā o-mūdīlē-jā* 'I am slow, linger', from *mūdīlū mūdīlū* 'slow, lingering', and like forms, we find *prokazīlējā* 'I make evil plots' from *prokaza* 'evil plot', *maqīlējā* 'I become a man' from *maqī* 'man', *pečatīlējā pečatīlējā* 'I seal' from *pečati* 'seal'.

§ 785. (3) The Lith. suffix *-ū-ju* (§ 773 p. 291, § 782.2 p. 309), which began with *o*-stems, has the same function as *-o-ju*. For further examples take the following: Lith. *melū'-ju* Lett. *melū-ju* 'I lie' from Lith. *melaī* Lett. *meli* pl. 'lies', Lith. *žalū'-ju* Lett. *saīlū-ju* 'I grow green' from Lith. *žala-s žale-s* Lett. *saīl'-sch* 'green', Lith. *buīnū'-ju* 'I saddle' from *baīna-s* 'a saddle', *dagū'-ju* 'I harvest' from *dāga-s* 'harvest', *pūlū'-ju* 'I fester' from *pūlei* (*pūl-iai*) 'matter, pus'. Derived from other than *o*-stems: *āszarūju* Lett. *assarūju* 'I pour out tears' from *aszarā assara* 'tear', Lith. *vagū'-ju* Lett. *waggūju* 'I draw furrows' from *vagā wagga* 'furrow', Lith. *dejū'-ju* 'I lament' from *dejā* 'a lament', *prāvardžīūju* 'I furnish with a surname' from *pravardē* 'surname'.

In the Lith. frequentative endings *-urioju ulojū* and *-aloju* (§ 783 p. 312), particularly in the last, there are variants *-iūju* and *-ioju*: here *-ioju* must be regarded in general as the older ending. Examples are: *žiburīū'-ju* 'I flare, flicker' from *žiburỹ-s* 'light, torch', *skliduriūju* 'I slide, swim', *tyvulūju* 'I spread widely'; *svam̃balūju* 'I dangle' from *svam̃bala-s* 'that which dangles, plummet', *maīrgalūju* 'I shine with varied hues', *svaigalūju* 'I reel'.

We have already remarked (§ 782.2 p. 309), that the Lith. verbs in *-ūju* may possibly have their counterparts in Slavonic, where the class *-aja* may contain some of them.

§ 786. (4) Lith. verbs in *-yju* from *i*-stems have been cited in § 771 p. 289; to Lith. *sziīrdy-jū-s* answers Lett. *si'rdī-jū-s* 'I take to heart'. Here are some further examples: Lith. *rūdy-jū* 'I rust' from *rudi-s* 'rust', *kirmy-jū* 'I am eaten of worms' from *kirmi-s* 'a worm', which was orig. an *i*-stem although inflected as a stem in *-io-* (II § 97 p. 289), Lett. *āustī-jū-s* 'I listen' from *āus-s* (Lith. *austī-s*) 'ear'. From

other stems: Lith. *rómyju* Lett. *rāmtju* 'I castrate' (properly 'I tame') from *roma-s romù-s rām-s* 'calm, tame, gentle', Lith. *vaĩdyjũ-s* 'I quarrel' from *vaĩda-s* 'a quarrel', *giñczyjũ-s* 'I strive' from *giñczia-s* 'strife', *guĩdryje-s* 'clears up' (of the weather) from *gaidrũ-s* 'cloudless, bright', *krũvyju* 'I heap' from *krāvà* 'a heap', Lett. *gūdtju* 'I make myself decorous or agreeable' from *gūd-s* 'demeanour, honour' (stem *gūda-*), *skāustiju* 'I tighten, wedge tight' from *skāust-s* 'wedge' (stem *skāusta-*), *medtju* 'I hunt something' from *mesch* (Lith. *mėdi-s -džio*) 'forest'.

Remark. Since there were Lith. denominatives in *-inu*, as *lĩnks-minu* (§ 624 p. 161), whose future *-jsiu* became identical with that of the verbs we are now discussing, verbs in *-inu* and verbs in *-yju* were mixed up together. Compare Leskien-Brugmann, Lit. Volksl. und Märchen, pp. 314 f. No special examination has been made to find out the local distribution of this confusion, or how far it went.

On Slavonic verbs in *-ja* from *i*-stems, see § 782.5 p. 311, § 789 p. 322.

§ 787. (5) The Slavonic ending *-ujā* (inf. *-ovati*) we have already traced to its beginning with the stems in *-ovũ* (§ 782.3 p. 309). As an independent suffix it became very common, especially to denote condition, possession of a dignity, and the like. Examples: *mirĩnujā* 'I am peaceful, keep the peace' from *mirĩnũ* 'peaceful', *prĩvujā* 'I am first' from *prĩvũ* 'first', *vojujā* 'I am a warrior, I make war' (inf. *vojevati*) from *vojĩ* 'warrior', *sũvėdėteljūjā* 'I am witness' from *sũvėdėtelĩ* 'witness', *sũvėdėtelĩstvujā* 'I give evidence' from *sũvėdėtelĩstvo* 'evidence', *obėdujā* 'I take a meal' from *obėdũ* 'meal', *ĩmenujā* 'I name' from *ĩmė* 'name'.

Remark. In the same way this ending was fertile in Lithuanian, where it took the shape of *-auju* (see § 782.3 p. 309). On the model of *karalāuju* = O.C.Sl. *kraljūjā* 'I am king' we have *vėszpatāuju* 'I rule', *karāuju* 'I make war', and others.



## K. CLASS XXXII.

ROOT + *-éio-* FORMING THE PRESENT STEM.

§ 788. The Verbs which here come under our consideration are those which are called Causal in Sanskrit grammars, because in Sanskrit their prevailing meaning is causal.

The Skr. accentuation *-āya-* must be regarded as original. Germanic also shows evidence that the accent lay after the root syllable; compare Goth. *fra-wardja* with *d*, but *vairþa* with *þ* (I § 530 p. 383), and Goth. *marzja* 'I vex' O.Sax. *merriu* 'I stop, hinder, disturb' with pr. Germ. *z* for *s* (I §§ 581 f. p. 434).

In all languages except Sanskrit, *-éio-* ran together with other present suffixes without possibility of distinction. But in Sanskrit this ending was differentiated by its accent from that of derivatives from *o*-nouns: *vēd-āya-ti* 'gives to understand, informs' is contrasted with *vasna-yá-ti* from *vasná-s* (§ 770 p. 288); on the later confusion of these two classes, see § 793. In Greek both are alike, and *φορέω* 'I carry about with me, I wear' looks just the same as *φιλέω* 'I treat as a friend' from *φίλος* (§ 770 p. 288, § 776.2 p. 296); how it came to pass that the two classes agreed in the verb infinite as well, where we should expect *\*φιλέοντες* in contrast to *φορέοντες*, has been explained in § 527 Rem. 1 p. 89. In Latin there is no distinction either, but *mon-eō* (*-ē-s*) is just like *claud-eō* (*-ē-s*) from *claudu-s*, and like *videō* for *\*vidē-iō* 2<sup>nd</sup> sing. *vidē-s* (§ 738 p. 263, § 777 p. 300). In Irish, there was a confluence of *-éiō* (*ad-suidim* 'I prolong, postpone'), *-e-iō* (*scorim scuirim* 'I unharness' § 770 p. 288), *-i-iō* (*fo-dālim* 'I divide up' § 771 p. 289), and *-iō* (*lēc-iu* 'I let, allow', § 719 p. 251). The same is true of Germanic: Goth. *fra-wardja* 'I bring to nothing, destroy' = Skr. *vart-áyāmi* like *haurnja* 'I blow the horn' (*-e-iō*) from *haurna-*, like *dulþja* 'I keep a feast' (*-i-iō*) from *dulþi-*, like *glitmun-ja* 'I shine' from *\*glitmun-* (§ 768 p. 282), and like *vaúr-k-ja* 'I work' (§§ 720 ff. pp. 251 ff.), compare § 781.2 pp. 306 f. Slavonic examples: *bužda* 'I wake' *budi-ši* (Skr.

*bōdhāya-ti*) like *goṣṭā* 'I entertain' *gosti-ṣi* from the *i*-stem *gosti* (§ 782. 5 p. 311) and like *būṣṭā* 'I am awake, watch' *būdi-ṣi* = Skr. *būdh-yāmi* (§ 702 p. 230, § 727 pp. 257 ff.).

Lith. has *-au*, a wide departure from the original form: *vartaũ* 'I turn, keep on turning about', 3<sup>rd</sup> sing. *vaṛto*, contrasted with O.C.Sl. *vraštā vrati-tũ* Skr. *vart-āyāmi* Goth. *fravard-ja*, cp. *bijaũ-s* § 586 p. 217 and *jũ'stau* § 782. 4 p. 310.

To the same class, as we shall see in § 790, belong some verbs with a weak grade of root, and one of these is Idg. *\*u-éiō*: Skr. *v-āyāmi* 'I weave', Lith. *v-ejũ* O.C.Sl. *v-ŷja* 'I wind or twist'. In this verb, and in this only, the original Idg. inflexion has been kept in Balto-Slavonic.

I therefore regard as original the inflexion *-éiō -eje-si -eje-ti* etc., with *-ejo-* and *-eje-* interchanging, as may be clearly seen in Aryan and Greek. What we see in Germanic may also be the same, with for the most part only regular changes; only we must regard such forms as O.H.G. 2<sup>nd</sup> sing. *denis legis* (1<sup>st</sup> sing. *dennu* 'I stretch' *leggu* 'I lay' = Goth. *þanja lagja*) as being ad-formates of *hevis ligis* etc. (§ 781. 2 p. 306). In Latin, the only form directly representing the Idg. is the 1<sup>st</sup> person singular in *-eō*; but perhaps the persons with *-eje-*, which must have become *-ē-* in proethnic Italic, are also preserved in *monēs* etc. But *monēmus monent*, like *claudēmus cludent*, must be ad-formates of *tacē-mus tacent*. See on this matter § 777 p. 300. Lith. *vartaũ* and O.C.Sl. *vraštā* will be explained in the next few paragraphs.

§ 789. The distinction between the *jo*-verbs which we have placed in Classes XXVI—XXXI, and verbs with *-éjo-*, is that in the former the *jo*-element was confined to the present from the proethnic stage onwards; whilst in the latter the perf. part. pass. and the forms closely connected with it show after the root a certain element which seems to be etymologically akin to the present formative suffix. This element is *-i-* or *-ī-*. Sanskrit and Germanic as a rule have *-i-*; e. g. Skr. *varti-tā-s* Goth. *fra-vardi-þ-s*, and so in the Lat. *moni-tu-s qu-i-tum*.

*-ī-* is regular in Balto-Slavonic, as Lith. *vartý-ti* (*vartý-siu*) O.C.Sl. *vrati-ti* (*vrati-chŭ*). *-ī-* is also seen in the following. Gr. (*F*)-*ī-rēā* 'willow' (beside (*F*)-*ī-rv-ς* 'felloe'), Lat. *v-ī-ti-s*, O.H.G. *w-i-da* 'willow' (beside *w-i-d* 'cord of twisted withes'), Lith. *v-ý-ti-s* 'cane, switch' O.C.Sl. *v-i-tŭ* 'res in modum funis torta', which along with inf. Lith. *v-ý-ti* O.C.Sl. *v-i-ti* are connected with Idg. *\*u-éjō* (see § 788 p. 319). Skr. *gybh-ī-tá-s* (*a-grah-ī-ṣ-ṭa* *grah-ī-ṣya-ti*) beside *gybh-āya-nt-*, *hāv-ī-tavē* beside *hāv-āya-ti*, *mṛd-ī-kā-m* 'pity, compassion' beside *mṛd-āya-ti*. Lat. *noc-ī-vo-s* is doubtless related to *noceō* as O.C.Sl. *chodivŭ* is to *chodi-ti*, or *ljubivŭ* to *ljubi-ti* (cp. II § 64 Rem. 2 p. 136, and pp. 137 f.).<sup>1)</sup>

From these facts it follows that we have in this verbal class what may be called a Root-Determinative *-i-*, parallel to the determinative *-u-*; thus Skr. *v-āya-ti*: Gr. (*F*)-*ī-rv-ς* O.H.G. *w-i-d* = Skr. *sr-āva-ti*: *sr-u-tá-s* (see § 488 pp. 46 f.). The only difference is that whilst *-u-* was restricted to some few examples (compare however § 596. 2 pp. 136 f. for what is said on the present suffix *-nu-*), the *-i-* was fertile even in proethnic Idg. itself. If this view of the *-éjō-* class is correct, the class must be very closely connected with present forms like Skr. *am-ī-ti* (§§ 572 ff. pp. 114 ff.). Skr. *v-āya-ti*: *am-ī-ti* = *sr-āva-ti*: *tar-u-tē* (§ 596. 2 pp. 136 f.).

Now are *-éjō-* and *-ī-* connected in any way with the *-jō-* suffix of Classes XXVI—XXXI? It is an obvious conjecture that there may be the same relation between *-ejō-* and *-jō-* as between *-eyo-* and *-yo-* (*v-āya-ti*: *hár-ya-ti* = *sr-āva-ti*: *bhár-va-ti*, see § 488 p. 47), or *-eno-* and *-no-*, or between *-eso-* and *-so-* (*-esko-* and *-sko-*). I do not venture either to assert or to deny this; but seeing how uncertain the matter is, I think it best not to group the *-éjō-* class with the *-jō-* classes.

1) Cp. Skr. *d-mī-vā* 'pain' beside *amī-ti* beside which we have Avest. *amayavā-* 'pain', which form Bartholomae uses to postulate an Avest. pres. *\*amayē-iti* (Stud. Idg. Spr., II 178).

We now return to the Balto-Slavonic present exemplified by *vartaũ vrašta*.

The simplest explanation of the Slavonic present inflexion is that *-i-* has come in from the infinitive stem: *vrati-ši vrati-tũ* then follow *vrati-ti*, a process which has an exact parallel in the change of *\*gostijā -yēši* etc. to *goštā gosti-ši* by analogy of *gosti-ti gosti-chũ* (§ 782. 5 p. 311).

**Remark.** Another explanation of the origin of this Slavonic present type is possible. Sanskrit has a mid. optative e. g. *vēday-i-ta* beside *vēdāya-tē*, injunctive *dhvanay-i-t* (op. *ā-brav-i-t*), and participle *vēday-āna-s*. See § 574 pp. 115 f., § 951. The indicative to *vēday-i-ta* would be *\*(a-)vēdē-ta*, and Bartholomae conjectures that certain forms usually regarded as *oī*-optative may be this very indicative (Stud. Idg. Spr., II 127). This would make it possible to derive 3<sup>rd</sup> sing. *vrati-tũ* from *\*vortēi-t(i)*. I should give more weight to this explanation were it not for a very strong suspicion that these Aryan forms are due to analogy, and are not proethnic at all.

The Lith. inflexion *-au -yti* is found in Lettic too (*-u -it*) and also in Prussian (*billa* 'speaks' inf. *billi-t billi-twei*); it therefore is proethnic in Baltic. Its origin is a confusion of the old inflexion of our class with both the earlier and the later group of *ā*-denominatives, that is to say, with verbs like *bijaũ-s* (§ 586 p. 127) and verbs like *jũstau* (§ 782. 4 p. 310). But why was it this confusion went so far that the *ā*-flexion drove the *eīo*-flexion quite out of the present, but yet *-a* did not drive *-i-* out of the infinitive? (contrast *bijaũ-s bijó-ti-s*.) I explain this by supposing that Baltic once possessed verbs like Lat. *cubāre sonāre*, which had the *ā*-suffix in the present only. O.C.Sl. *ima-mĩ* 'I have' likewise shows *ā*-flexion only in the present (inf. *imē-ti*). The Lith. present stems containing Idg. *-o-* in the root syllable, such as *vartō-* = *\*vortā-* (*√uert-*), seem to have a parallel in Lat. *domā-* (*domō domās*) O.H.G. *zamō-* (*zamōm zamōs*) = Idg. *\*domā-* from *√dem-*, since this is best explained as a contamination of *\*dymā-* (Skr. *damā-yā-ti*) and *\*domējo-* (Goth. *tamja* O.H.G. *zemm(i)u*). *laižaũ* 'I lick' (*laižỹ-ti*) is the equivalent of Goth. *bi-láigō* 'I lick over'.

The question next arises when *-ā-* got the better of *-ejo-*, as the Baltic shews it did at some time or other. I am inclined to place the change in the proethnic period of Balto-Slavonic. What inflexion came just before the type actually found in Slavonic, *vraštā vratiši* and so forth, is not at all clear. It may very well have been one answering to the Lith., that is 3<sup>rd</sup> sing. *\*vortā-ti* 1<sup>st</sup> pl. *\*vortā-mū*, cp. *ima-tū ima-mū*, and on this supposition it is easier to explain the actually found *ī*-forms, than if we suppose the Slavonic to have passed direct from *\*vortīje-ti* to *\*vortī-ti*. But then we must also assume that *\*gostīja \*īješi* = Idg. *\*i-īō \*i-īé-si* (§ 782. 5 p. 311) changed to *goštā gostīši* only on the analogy of *vraštā vratiši*. For the Baltic *i*-denominatives like Lith. *daly-jū sziřdy-jū-s* prove that these forms sprang up within the Slavonic area.

A complete levelling of the Causal conjugation with the *i*-Denominative is not unknown in Baltic. Here the *i*-denominative takes the lead. I find only a few examples in Lith., as *paisyju -yti* instead of *paisau -yti* 'to knock the beard off the barley, thresh' (cp. Skr. *pēśāya-ti*). There are more in Lettic; e. g. *rūfiju rūfīt* 'to stretch' instead of Lith. *rāžau rāžyti*, *pe'lnīju pe'lnīt* 'to earn' instead of Lith. *pe'lnau pe'lnyti*.

§ 790. In *éjo*-verbs with roots of the *e*-series, the root-syllable has and originally had generally the 2<sup>nd</sup> strong grade, *o*; as Gr. *γορέω* beside *γέρομαι*, Lat. *noneō* from  $\sqrt{\text{men-}}$ , Goth. *satja* beside *sita*, Lith. *vartýti* O.C.Sl. *vratiti* for *\*vortiti* from  $\sqrt{\text{uert-}}$ . This is why Aryan has *ā* in open syllables, as Skr. *bhāraya-ti* Avest. *bārayēti* from  $\sqrt{\text{bher-}}$ , if the hypothesis set forth in vol. I § 78 p. 69 is correct.<sup>1)</sup>

The European languages make it improbable that there were in the very oldest times any forms with the root-grade *e*. Aryan forms with *-a-*, as Skr. *jarāya-ti* from  $\sqrt{\text{ger-}}$ , *janāya-ti* from  $\sqrt{\text{gen-}}$ , may be explained by the admixture

1) No explanation of *ā* in *bhāraya-ti* which is in the least degree satisfactory has hitherto been put forward by those who deny this. The European forms adduced as parallel by Bechtel (Die Hauptprobleme der idg. Lautl., 169 f.) prove nothing at all. Compare § 843, Rem.

with denominatives derived from *o*-stems which will be described in § 793; on this supposition, *jarāya-ti* and *janāya-ti* would belong to the nouns *jāra-* and *jāna-* just as much as *mantrāya-ti* belongs to the noun *mántra-*. Or they may be explained in another way: In Aryan, the *éjo-* formation was often made from the connected primary verb instead of being built up on the root (see § 796), so that *pātāya-ti* would stand to *patāya-ti* (beside *pāta-ti*) as *kartaya-ti* to *kṛntaya-ti* (beside *kṛntā-ti*).

On the other hand, *éjo*-verbs with a weak grade of root have been found from the proethnic period onwards. They are commonest in Aryan, e. g. Skr. *gybhāya-ti*. The following are proethnic Idg.: Skr. *v-āya-ti* 'weaves' Lith. *v-ejũ* O.C.Sl. *v-ŷja v-ija* 'I wind, turn, wrap', beside Gr. *ἵ-τέα* Lat. *v-ī-ti-s* O.H.G. *w-ī-da* Lith. *v-ý-ti-s v-y-ti* O.C.Sl. *v-i-tŷ v-i-ti* and Gr. *ἵ-rv-ς* O.H.G. *w-i-d* (§ 789 p. 320); root without determinative in Skr. *ḍ-tu-m u-tá-s* perf. 3<sup>rd</sup> pl. *ūv-úr* pass. *a-ya-tē*, extended by *a* in *v-d-tavē* and others (Whitney, Skr. Roots, pp. 157 f.).<sup>1)</sup> Skr. *śv-āya-ti* 'swells, thrives, is strong' beside Gr. *κν-έω* 'I am pregnant', Lat. *qu-eō*, with supine *qu-i-tum* (the resemblance of *eō* : *itum* made the conjugation of *queō* run like *eō* — *quimus quibō* etc.); the same root in Skr. 3<sup>rd</sup> pl. *śū-śuv-ur śū-ná-s á-śv-a-t śáv-as* Gr. *ἄ-κῶ-ρος κῶ-μα* Lat. *in-ciēns* for *\*-cy-iens* (§ 715 p. 248, § 717 p. 250), and with *a*-extension in Skr. *śv-ā-trá-s* Gr. El. *ἐπ-εν-πήτω* and others (§ 737 p. 263). Skr. *dhun-āya-tē* 'roars' (beside *dhvan-a-ti* 'makes a sound') O.Sax. *duniu* Mid.H.G. *düne* O.Icel. *dyn* 'I roar, rumble, groan'. Of the same kind are: Skr. *hv-āya-ti* 'calls' Avest. *zb-aye-iti zuv-aye-iti* beside Skr. *hāv-a-tē* perf. *ju-hāv-a* aor. *á-hv-a-t á-huv-a-t*, Lat. *ci-eō* beside *ac-ciō ci-tu-s* Gr. *κί-ω κί-vv-μαι*; O.H.G. *zunt(i)u* 'I kindle' with Goth. *tandja* 'I kindle' beside Mid.H.G. *zinden* (strong verb) 'to burn, glow'. Uncertain: Gr. *qλ-έω* 'I overflow' beside *ἐκ-φλαίνω* Lat. *fl-ē-re*;

1) From this *uei- uē- uí-*, which had become a root again before the end of proethnic Idg., a present was again formed by means of *-éjo-*; Skr. *vy-āya-ti* 'winds up, wraps up, covers, hides', Lat. *vi-eō*.

Goth. *ga-nŕja* 'I cause' from  $\sqrt{\text{nes-}}$ , originally 'I make to come forward'; O.C.Sl. *brija* (*brĭja*) *bri-ti* 'to shear, shave' beside Skr. *bhur-tj-* Gr. *qáō-o-ς*, and others.

§ 791. In all branches of our group, the verbal class now being discussed has two distinct meanings, both of which must be regarded as holding for the original language. Each of them serves to contrast a verb with a simple verb from the same stem.

First there is the Causal sense; the subject of the *éio*-verb sets some one in motion, impels him to do something; in fact, makes him do the action of the simple allied verb. Skr. *bōdhāya-ti* O.C.Sl. *budi-tŭ* 'wakes up, makes wake' beside *bōdha-ti* *būdi-tŭ* 'is awake'. Skr. *tarṣāya-ti* 'makes languish, thirst' beside *tṛṣya-ti* 'languishes, thirsts', Lat. *torreo* 'I dry up, make dry', O.H.G. *derr(i)u* (same meaning) beside Goth. *þaursei-þ mik* 'I am athirst'. Gr. *qoβίω* 'I make to flee, scare away' beside *qέβομαι* 'I flee'. Lat. *moneō* 'I make some one think, remind' beside *meminī*. Goth. *satja* 'I make sit, I place' (Skr. *sādāya-ti*) beside *sita* 'I sit'.<sup>1)</sup>

Secondly, they express a meaning which may be called Intensive, Iterative, or Frequentative. This is often weak and elusive, and in many cases was certainly extinct at the time when we find the verb actually used. Skr. *vi-vāhayati* beside *vi-vahati* 'leads away (a bride), leads her home' Avest. *vādayē-iti* 'leads home', O.C.Sl. *voždā vodi-ti* freq. of *veda* 'I lead',  $\sqrt{\text{uedh-}}$ . Gr. (*f*) *oxέομαι* pass. 'I am taken backwards and forwards, I am carried', Goth. *vagja* 'I move' beside *ga-viga* 'I move', O.C.Sl. *vožā voziti* freq. of *veza* 'I carry, convey',  $\sqrt{\text{uegh-}}$ . Skr. *mar-daya-ti* beside *mydnā-ti marda-ti* 'presses, crushes', Lat. *mordeo* beside perf. *momordi* = Skr. *mamarda*. Skr. *ā-tanayati* 'stretches, makes stiff' beside *ā-tanōti* 'stretches, pulls up' a piece

1) Sometimes these verbs are causal to the Passive of the simple verb; as Goth. *ga-tarhja* 'I cause to be seen' *fra-atja* 'I divide for food, cause to be eaten' O.H.G. *ezzu* 'I cause to be grazed upon, use for pasture' (also 'I let eat, give a taste').

of weaving, Goth. *-þanja* 'I lengthen, stretch'. Skr. *pēṣaya-ti* beside *pināṣ-ti* 'treads or crushes to atoms' Lith. *paisý-ti* 'to knock (barley, in order to free it from the beard)'. O.Ir. *for-tugim* 'I cover, hide', O.H.G. *decch(i)u* 'I cover' beside Lat. *tegō*. Skr. *dhārāya-ti*, beside *dharati* (very rare), 'holds fast, keeps', *nōdaya-ti* 'drives on' beside *nudā-ti* 'knocks, strikes away, pulls', *rājya kārayati* and *karōti* 'is king, uses lordship'. Gr. *φορέω* 'I carry about with me, wear' beside *φέρω* 'I carry', *ποτέομαι* 'I fly about, flutter' beside *πίτομαι* 'I fly', *στροφέω* 'I turn round and round excitedly' beside *στρέφω* 'I twist, turn', *τροπῖω* beside *τρέπω* 'I turn', *ῥέω* 'I hold fast' beside *ἔχω* 'I hold, have'. Lat. *lūceō* (in O.Lat. also causal 'to make shine'), *haereō*, *tondeō*, and others. Goth. *uf-rakja* 'I reach up' beside Gr. *ὀρέγω* 'I reach out', Goth. *þragja* 'I run' beside Gr. *τρέχω* 'I run', O.Sax. *kenniu* 'I beget' beside Skr. *jāna-ti* 'begets'. The Intensive or Frequentative meaning is clearest in Balto-Slavonic: cp. further Lith. *ganý-ti* 'to keep (animals), pasture them' O.C.Sl. *goni-ti* 'to drive' freq. of *ženq gna-ti* to drive, hunt', ✓ *ghen-* 'strike, kill', Lith. *grāšý-ti* freq. of *grēžiù grēszti* 'to turn, twist, bore', O.C.Sl. *vlači-ti* freq. to *vlēka vlēsti* 'to pull, drag along'.

I shall not go into the question of the relation between these two original uses. An attempt to explain it is made by Gaedicke, *Der Acc. im Veda*, pp. 276 f.

§ 792. Considering the very real and living connexion which existed between the *éyo*-present and the primary present stems, e. g. Skr. *bōdhāya-ti* and *bōdha-ti*, *vārāya-ti* and *vr̥ṇō-ti*, it is easy to understand why *éyo*-forms were often built up on a complete present stem, not on the root. Thus Skr. *jīvāya-ti* O.C.Sl. *živi-ti* beside *jt-vāmi ži-vq* (inf. *ži-ti*) 'I live' (§ 488 p. 47), Skr. *dhūnāya-ti* beside *dhū-nā-ti dhū-nō-ti* 'shakes, shatters' (cp. Gr. *θῦνέω* § 801), *kṛntaya-ti* with *kartaya-ti* beside *kṛntā-ti* 'cuts', Lat. *misceō* beside a form *\*miscō* for *\*mic-scō* ✓ *meixk-*, O.H.G. *scein(i)u* beside *scī-nu* 'I shine'. Other examples will be given below.



§ 793. There are often nouns which most closely resemble these verbs both in form and meaning. The result of this was that *éjo*-verbs were formed from nouns direct. If, for instance, people derived Skr. *vāj-áya-ti* 'hastens, conquers, spurs on, makes something use its power' (= Goth. *us-vakja* 'I wake up') from *vāja-s* 'speed, power' — which was really inevitable, as there was no such parallel stem as *\*vaja-ti* — it was easy to form *mantráya-tē* 'advises' from *mán-tra-s* 'advice'. It was, as has been observed in § 487 p. 43, the action of the same principle which produced in Gothic *fullnan* from *full-s* 'full' by analogy of *af-lifnan áuknan*, in Lithuanian *línksmin-ti* from *línksma-s* 'glad' by analogy of *krùvin-ti kùpin-ti*, *rentù* from *rēta-s* 'thin' following *tenkù tèkti*, *gelstù gelsti* from *gelta-s* 'yellow' following *virstù vīrsti mīrsztù mīrszti* (§ 623 p. 160, § 624 p. 161, § 635 p. 173, § 686 p. 217). Compare further Skr. *muṣ-nd-ti* 'steals' from *mūṣ-* 'a mouse' § 599 Rem. p. 143.

These *éjo*-denominatives are commonest in Germanic and Balto-Slavonic, and one or two of these new formations occur in both branches: Goth. *fulljan* O.C.Sl. *plūni-ti* 'to fill' from *full-s* *plūnū* 'full' (*\*pl-no-s*), Goth. *hailjan* O.C.Sl. *celi-ti* 'to heal' from *hail-s* *celū* 'whole, healthy'. But it is quite possible that these two developements are independent.

§ 794. Pr. Idg. Examples with monosyllabic root, as Skr. *v-áya-ti* Lith. *v-ejù* O.C.Sl. *v-īja*, Skr. *śv-áya-ti* Lat. *qu-eō*, have already been cited in § 790 p. 323.

As regards the following examples, which shew a strong grade of root, it is to be remembered that this formation was always an active living type in Aryan, Germanic, and Balto-Slavonic; so that it is not unlikely that all these languages hit upon the particular forms independently. I therefore give by preference such examples as are found in Greek or Italic as well, where the type was less prolific.

*\*bhor-éjō* √ *bher-*: Skr. *sam-bhāraya-ti* 'causes to be gathered', Gr. *φορέω* 'I carry about, wear'. *\*tor-éjō* √ *ter-*: Skr. *tārāya-ti* 'gets carried over, transports, furthers', Gr. *τορέω*

'I make to pierce, shout loudly'. \**uol-éið* √ *uel-*: Skr. *prā-vāraya-ti* 'appeases, offers, offers for sale', Goth. *valja* 'I choose', O.C.Sl. *voli-ti* 'to wish, to prefer'. \**mon-éið* √ *men-*: Skr. *māndya-ti* 'honours, shows honour'<sup>1)</sup> Avest. *manaye-iti* 'causes to believe, regards' (for *a* cp. I § 200 pp. 168 f.), Lat. *moneō* (O.H.G. *manēm manōm* 'I imagine' with different inflexion), Lith. *isz-maný-ti* 'to understand'. \**ton-éið* √ *ten-*: Skr. *a-tānaya-ti* 'stretches, stiffens' *sā-tānaya-ti* 'gets carried out, brings to conclusion', Goth. *uf-panja* 'I stretch, lengthen out'. \**q̄iou-éið* √ *q̄ieu-* (Hom. ἔ-σσευε): Skr. *cyāvāya-ti* 'sets in motion, moves from its place', Gr. σο(φ)έω in ἐσσομένηνον · τεθορυβημένον, ὠρυμένηνον Hesych. (I § 489 p. 360).<sup>2)</sup> \**poi-éið* √ *pei-* (Skr. *pāy-a-tē*): Skr. *pāyāya-tē* 'gives to drink', O.C.Sl. *poji-ti* 'to give to drink' (1<sup>st</sup> sing. *pojā*). \**tors-éið* √ *ters-* 'to be dry, thirsty': Skr. *tarśāya-ti* 'makes to thirst or pine', Lat. *torreō*, O.H.G. *derr(i)u* (pr. Germ. \**parzi(i)ð*) 'I make dry, cause to wither'. \**mord-éið* √ *merd-*: Skr. *mardaya-ti* 'presses, oppresses, crushes', Lat. *mordeō*. \**uort-éið* √ *uert-*: Skr. *vartaya-ti* 'sets circling, rolls, causes to take a certain bent or direction', Goth. *fra-vardja* 'I bring to nought, destroy, make away with', Lith. *vartý-ti* O.C.Sl. *vratī-ti* freq. 'to turn, twist'. \**kroth-éið* √ *kreth-*: Skr. *śrāthaya-ti* (*śrathāya-ti*) 'loosens, frees', O.H.G. *rett(i)u* (Goth. \**hradja*) 'I tear away, rescue'. \**bhlog-éið* √ *bhleḡ-*: Skr. *bhrājaya-ti* 'causes to gleam or shine',<sup>3)</sup> O.H.G. *blecch(i)u* (Goth. \**blakja*) 'I make visible, show'. \**logh-éið* √ *legh-*: Goth. *lagja* 'I lay', O.C.Sl. *loži-ti* 'to lay'. \**month-éið* √ *menth-*: Skr. *manthaya-ti* 'causes to be stirred

1) The meaning of this verb was influenced by the subst. *māna-s māna-m* 'opinion, high opinion, esteem, honour', in the same way as H.G. *blenden* (O.H.G. *blenten* 'to daze, darken, blind' = O.C.Sl. *blqđiti* 'to wander' Mod.Slov. *bluditi* 'lead astray, deceive') by the adj. *blind*, whose factitive the verb is now used for, though originally the factitive was Goth. *-blindjan* A.S. *blindan*. Compare § 681 p. 213 on Skr. *lōṣṭa-tē*.

2) Parallel verb σοῦμαι = σοόμαι, a denominative, see W. Schulze in Kuhn's Zeitschr. xxix 264 f.

3) This may also be formed from the pres. *bhrāja-te* = Idg. \**bhleḡe-tai* (§ 494 p. 55), by analogy.

up', O.C.Sl. *mati-ti* 'to bring into perplexity'. \**tonag-ēiō* ✓ *tenag-*: Lat. *tongeō*, Goth. *þagkja* 'I think over, think about', but cp. § 804. \**nok-ēiō* ✓ *nek-*: Skr. *nāśāya-ti* 'causes to disappear, destroys', Lat. *noceō*.<sup>1)</sup> \**louq-ēiō* ✓ *leuq-*: Skr. *rōcāya-ti* 'causes to shine, lights up', Lat. *lūc-eō* 'I shine, am bright' and O.Lat. 'I make shine'. \**loubh-ēiō* ✓ *leubh-*: Skr. *lōbhāya-ti* 'excites some one's desire, attracts' Goth. *us-laubja* 'I allow', O.C.Sl. *ljubi-ti* 'to love'. \**gōus-ēiō* ✓ *geus-*: Skr. *jōśāya-tē* 'likes, takes pleasure in, approves', Goth. *kāusja* 'I taste, try'. \**suop-ēiō* ✓ *suep-*: Skr. *svāpāya-ti* 'sends to sleep', O.H.G. *int-swebb(i)u* 'I send to sleep' O.Icel. *svef* 'I pacify, quiet'. \**uogh-ēiō* ✓ *uegh-*: Skr. *vāhaya-ti* 'conveys, makes (a carriage or horses) go, drives', Gr. *ὀχέω* 'I convey, make ride' pass. 'I am carried about, am carried, I ride on', Goth. *ga-vagja* 'I move', O.C.Sl. *vozi-ti* 'to carry (in a vehicle), vehere'. \**uoīd-ēiō* ✓ *ueīd-*: Skr. *vēdaya-tē* 'gives to know, informs', O.H.G. *weiz(i)u* 'I give to know, I show'. \**bhoīd-ēiō* ✓ *bheīd-*: Skr. *bhēdaya-ti* 'splits, divides', O.H.G. *beiz(i)u* 'I make to bite, I bait'. \**pot-ēiō* ✓ *pet-*: Skr. *patāya-ti* 'makes to fly or fall', Gr. *πτεῖν* 'I fly, flutter'. \**dhogh-ēiō* ✓ *dhegh-*: Skr. *dāhaya-ti* 'causes to be burnt', Lat. *foveō* 'I warm, keep warm, cherish, take care of'.<sup>2)</sup> \**bhog-ēiō* ✓ *bheg-*: Skr. *bhājāya-ti* 'drives away',<sup>3)</sup> Gr. *φοβέω* 'I make to flee, scare or hunt away'. \**tjog-ēiō* ✓ *tjeg-*: Skr. *tyājaya-ti* 'bids leave alone', Gr. *σοβέω* 'I drive off quickly, scare away'. \**sod-ēiō* ✓ *sed-*: Skr. *sādāya-ti* 'gets seated, sits', O.Ir. *ad-suidim* 'I prolong, postpone' (Thurneysen, Kuhn's Zeitschr. xxxi 97), Goth. *satja* 'I seat, place'. \**od-ēiō* ✓ *ed-*: Skr. *ādaya-ti* 'causes to eat, feeds, fattens', Goth. *fra-atja* 'I divide up for a meal' O.H.G. *ezz(i)u* 'to make eat, give to eat, feed'. \**pāk-ēiō*

1) The construction *nocēre alicui* is doubtless due to the analogy of *obesse officere* etc.

2) Compare *fōmes* 'kindling, tinder' (for \**forimes*) with Lett. *daglīs* 'tinder'.

3) Skr. *bhaj-* is contaminated of two distinct roots, that of *ḡayeyir* (Fick, Wtb. I<sup>4</sup> 87) and that of *ḡṛṇomai* Lith. *bėgnu* (id. ib. 490).

✓ *pāk-*: Skr. *pāśāya-ti* 'binds', O.H.G. *fuog(i)u* O.Sax. *fōgiu* 'I make fit, join, bind together'. Skr. *hrādaya-ti* 'causes to make a sound' (*hrāda-tē* 'sounds'), O.H.G. *gruoz(i)u* O.Sax. *grōtiu* 'I address, speak to'; if another, Goth. *grēta* 'I wail out', is of this kin, then we must assume Idg. *\*ghrōdēiō*. Goth. *af-dauī-þs* 'exhausted' pres. *\*dōja* for *\*dōuīō* in the first instance (I § 179 p. 156), O.C.Sl. *davi-ti* 'to strangle'. —

In the following, *-ēiō* was not added immediately to the root; see § 792 p. 325.

*\*tons-ēiō* from the stem *ten-s-*: Skr. *taśaya-ti* 'pulls about, tugs, tears, shakes', Lith. *tāsy-ti* 'to drag about'; cp. Skr. *taśa-ti* Lith. *tēs-iū* § 657 p. 191. *\*uos-ēiō* from stem *u-es-*: Skr. *vāsāya-ti* 'causes to put on, clothes with something', Goth. *ga-vasja* O.H.G. *weriu* 'I clothe'; cp. Skr. *v-ās-tē* Gr. *ἐντ-εσ-ται* § 656 p. 191.

*\*rōdh-ēiō* stem *rē-dh-*: Skr. *rādhaya-ti* 'brings about', O.Ir. *no rāidiu* 'I speak', Goth. *rōdja* 'I speak', O.C.Sl. *radi-ti* 'to consider, care for'; cp. Skr. *ārādha-t* Goth. *ur-rēda* § 689 p. 220. *\*iōudh-ēiō* *\*iudh-ēiō* stem *ieu-dh-* 'to stir, set in motion': Skr. *yōdhāya-ti* 'involves some one in war, fights against', Lat. *jubeō* properly 'I set in motion' (cp. Lith. *jūdinu* 'I move, cheer up, exhort'); cp. Skr. *yōdha-ti* etc., *loc. cit.*; the O.Lat. *joubeō* is only once found (S. C. de Bacch., 27), and *ou* was perhaps only caused by the spelling of *jousiset* which precedes.<sup>1)</sup>

Goth. *stōja* 'I direct' for *\*stōuīō* (I § 179 p. 156), O.C.Sl. *stavljā* 'I place, stay, stem' with Goth. *staua* 'court of law' (see *ibid.*) O.C.Sl. *stavū* 'compages' *po-stavū* 'loom-frame, or web' *stava* 'joint, limb' Lith. *stovà* 'place' from ✓ *stā-* 'stand'; to argue from Gr. *στῆω στῆ-λο-ς* Skr. *sthū-lā-s*, we had best assume *stū-* *stāu-* (cp. § 488 pp. 44 ff.).

The causal Skr. *jīvāya-ti* 'makes living, lets live' O.C.Sl. *življā* 'I make alive' is probably derived from the present

1) If *joubeō* is a genuine form, it may be a variant of *jūbeō* like Skr. *śōcāya-ti* beside *śucāya-ti*.

*jī-va-ti* *ži-ve-tū* 'lives' (§ 792 p. 325), whilst Goth. *ga-qiuja* 'I make alive' is a denominative causal from *qiu-s* 'living' (§ 793 p. 326, § 806).

§ 795. Aryan. A pass. part. in *-i-tá-* formed from all verbs with strong grade of root syllable; see § 789 pp. 319 f.

Skr. *dhārāya-ti* Avest. *dāraye-iti* 'holds fast, carries, supports, strengthens, preserves', O.Pers. *dārayāmīy* 'I hold, possess', √ *dher-*. Skr. *vārāya-ti* Avest. *vāraye-iti* 'holds back, keeps off, hinders': Goth. *varja* 'I hinder, protect, defend', √ *uer-*. Skr. *nāmāya-ti* *namāya-ti* Avest. *nāmaye-iti* 'makes bend, bends' (tr.), √ *nem-*. Skr. *śrāvāya-ti* *śravāya-ti* Avest. *srāvaye-iti* 'causes to hear, recites, informs', √ *kley-*. Skr. *cāyaya-ti* *cayaya-ti* 'ranges together, collects', √ *qei-*. Skr. *nāyaya-ti* 'causes to be carried away'. Skr. *vardhāya-ti* Avest. *vardāye-iti* 'causes to grow, increases, furthers'. Skr. *bandhaya-ti* 'causes to be bound, chains', Avest. *bandaye-iti* 'binds', √ *bhendh-*. Skr. *raḥāya-ti* Avest. *renjaye-iti* 'expedites, despatches', √ *lengh-* (I § 199 p. 167). Skr. *jambhāya-ti* Avest. *zembaye-iti* 'grinds to powder, destroys', √ *ḡembh-*. Skr. *rōcāya-ti* 'causes to shine, illuminates', Avest. *raocaye-iti* 'lights up, illuminates': Lat. *lūceō*, see § 794 p. 328. Skr. *rēcāya-ti* 'makes empty, lets free, deserts', Avest. *raēcaye-iti* 'deserts', √ *leiq-*. Skr. *saddāya-ti* 'places', Avest. *ni-šādāye-iti* 'causes to sit down, brings under, subdues' O.Pers. *niy-ašādāya-m* 'I made sit down, arranged' (for *š* in the O.Pers. cp. I § 556 p. 410): Goth. *satja*, § 794 p. 328. Skr. *bhāyaya-ti* 'causes fear to, frightens', √ *bhaḡ-*.

Many Skr. forms are proved by their root syllable to be re-formates. E. g. *arjaya-ti* (as also *ārja-ti* and suchlike), from √ *reḡ-* 'to stretch oneself' (*rājīṣṭha-s*, Gr. *ῥάγις*), is a transformate of *fjya-ti* following *ardhāya-ti* : *ṛdhya-tē ṛdhnō-ti* etc. *tōlaya-ti* 'lifts, weighs' formed from *tul-* (*tulaya-ti* etc.) = Idg. *tǵl-* (I § 287 p. 229, § 290 p. 232), follows *bōdhāya-ti* : *budh-* and the like.

Forms with weak grade of root. Skr. *v-āya-ti* 'weaves': Lith. *v-ejũ*, see § 790 p. 323. *śv-āya-ti* 'swells, thrives, is

strong': Gr. *xv-ém* Lat. *qu-eō*, see *ibid.* Skr. *hv-āya-ti* Avest. *zb-aye-iti zur-aye-iti* 'calls'. Skr. *dhun-aya-tē* 'roars': O.Sax. *duniu*, see *ibid.* *tul-aya-ti* beside *tōl-aya-ti*, see just above. *grbh-āya-ti* 'grasps'. *śuc-āya-ti* 'shines, beams'. *pīd-aya-ti* 'presses' for *\*pi-zd-eje-ti* ('makes sit down') from *√sed-*, see I § 591 p. 447. Avest. *urūpaye-iti* 'does harm'. Add doubtless Skr. *chad-āya-ti* beside *chandaya-ti* from the pres. *chant-ti* 'appears'.

§ 796. Many new forms from Primary Present Stems (see § 792 p. 325):

Skr. *irāya-ti* 'sets a-going, excites, arouses' beside *ir-tē* Idg. *\*ǵ-tai*, *pūrāya-ti* 'fills' beside *pūr-dhi* Idg. *\*pǵ-dhi*, Class I § 497 p. 57.

A group of fairly common forms, such as Skr. *patāya-ti* Avest. *pataye-iti* beside Skr. *pātāya-ti*, have been derived from forms of Class II A, as has been already said (§ 790 pp. 322 f.). The following may be connected with stems of Class II B: Skr. *gūhaya-ti* Avest. *guzaye-iti* (but not O.Pers. *gaudayāhy* 2<sup>nd</sup> sing. conj.), cp. Skr. *gūha-ti* 'hides' Avest. mid. *guza-tē*; Skr. *turāya-ti*<sup>1)</sup> (beside *tārāya-ti*), cp. *turā-ti* 'gets through, makes oneself master of'. But this view is not the only one possible, since the *éjo*-verbs themselves could have a weak grade of root syllable (§ 790 p. 323, § 795 p. 330).

Avest. *titāraye-iti* 'seeks to overcome, or strike down' beside Skr. *ti-tar-ti* Avest. *ti-tar-a-p* Classes III, IV, § 540 p. 100, § 548 p. 105.

Skr. *sajjaya-ti* 'fastens on' beside *sajja-tē* for *\*sa-zj-a* Class VI § 562 p. 110.

Causal of the Intensive class. Skr. *dādharaya-ti* 'causes to hold fast' from *dā-dhar-ti*, *jāgarāya-ti* 'awakes, enlivens' from *jā-gar-ti*, Class V § 560 p. 109. Skr. *dandaśayi-toā* gerund 'having caused to be severely bitten' beside *dān-daś-āna-s* partic., from *dqš-* 'to bite', *varīvarjāya-nt-* 'turning

1) O.Pers. *atarayāma* may be the same formation (I § 290 p. 232).

backwards and forwards' beside *vārī-vrj-at-* partic., from *varj-* 'to turn, twist' Class VII § 568 p. 113.

Skr. *prīṇaya-ti* 'gladdens, delights, makes inclined' from *prī-ṇā-ti*, *dhūnaya-ti* 'moves to and fro, shakes' from *dhu-nā-ti*, Class XII § 599 pp. 142 f.; *dhūnaya-ti* is perhaps identical with Gr. *θύνειω*, § 801.

Skr. *iṣāṇaya-nta* from *iṣāṇa-t* Class XIV, and *iṣāṇyā-ti* Class XIX (§ 619 pp. 156 f., § 743 p. 266), cp. Gr. *ὀλιγο-δρανεῖω* beside *δραύω* § 801.

From Present Stems of Classes XV and XVI, §§ 625 ff. pp. 162 ff. Skr. *kṛntaya-ti* (beside *kartaya-ti*) Avest. *ker'ntaye-iti* 'cuts, splits' from Skr. *kṛntā-ti* Avest. *ker'nta-iti*. Skr. *rundhaya-ti* 'stems, holds back, torments' (beside *rōdhaya-ti*) from *ruṇaddhi rundh-a-ti*. Skr. *śundhaya-ti* 'cleanses' (beside *śōdhaya-ti*) from *śunaddhi śundh-a-ti*. Skr. *limpayā-ti* 'besmears, anoints' (beside *lēpaya-ti*) from *limp-ā-ti*. Skr. *bṛhaya-ti* 'strengthens' (beside *barhaya-ti*) from *bṛh-a-ti*. Skr. *dṛhaya-ti* 'makes fast, fixes firmly' from *dṛh-a-ti*. Avest. *bunjayē-iti* 'cleanses' from *bunj-a-iti*.

O.Pers. 3<sup>rd</sup> pl. *a-kū-nav-ayata* 'they made' beside *a-kū-nav-am* 3<sup>rd</sup> sing. *a-kū-nav-a*, Classes XVII and XVIII, § 640 p. 178, § 649 p. 185.

Skr. *pinvaya-ti* 'makes swell or abound' from *pī-nva-ti*, Class XVIII § 651 p. 186.

From unreduplicated Presents, Classes XIX and XX, § 656 pp. 190 f. Skr. *vāsāya-ti tāsaya-ti*, see § 794 p. 329. Skr. *vakṣaya-ti ukṣaya-ti* Avest. *varṣaye-iti* 'makes grow' from Skr. *ūk-ṣa-ti* Avest. *vax-ṣa-iti*. Skr. *bhīṣāya-tē* 'frightens, overawes' (beside *bhāyaya-ti*) from *bhy-āsa-ti* § 659 p. 195. Avest. *aiwy-axšayēinti* 'they inspected' beside O.Pers. *patiy-axšaiy* 'I inspect' § 659 p. 194.

From reduplicated s-Presents (Desideratives), Class XXI §§ 666 f. pp. 198 ff. Skr. *cikīrṣaya-ti* from *cī-kīr-ṣa-ti* 'wishes to make, begins, purposes', *śikṣaya-ti* from *śikṣa-tē* 'learns' for \**śi-ṣk-ṣa-tai*.

*prachaya-ti* (gramm.) from *prchā-ti* 'asks' ground-form

\**pr(k)-ske-ti*, *ichaya-ti* (beside *ēṣaya-ti*) from *ichá-ti* 'desires', Class XXII §§ 670 f. pp. 202 f.

*mṛḍāya-ti* 'is gracious' from *mṛḍā-ti* for \**mṛḍ-du-ti* Class XXV § 692 p. 222.

*chāyaya-ti* from *cha-ya-ti* 'cuts up', Class XXVI § 707 p. 237. *pyāyāya-ti* from *pyā-ya-tē* 'swells', Class XXVIII § 736 p. 262.

§ 797. Near kin to the *ējo*-forms cited in the preceding paragraphs, are the Skr. groups ending in *-payati* and *-apayati*, as *sthā-payati* and *snā-pāya-ti*.

In these endings, as in *glej-p-* and *lej-p-* (§ 634 pp. 170 f.), *-p-* must be counted one of the Root-Determinatives which have been discussed in § 488 pp. 44 ff.<sup>1)</sup> In principle, these do not differ from ordinary present suffixes.

(1) *-payati*. The following may be considered as the forms which originated this type in Sanskrit. *sthāpaya-ti* causal of *st-ṣṭh-a-ti* 'stands', cp. Lith. *stapy-ti-s* 'to stand still' O.I.G. *stab* 'staff' *stabēm* 'I get stiff', *√stā-stā-*. *dāpaya-tē* causal of *dā-ti d-yā-ti* 'divides, gives a share', cp. Gr. *ḍān-τω* 'I divide up, tear in pieces' *ḍan-ἀν* 'expenditure' Lat. *daps*, *√dā-dā-*. *ḍīpāya-ti* causal of *ḍi-dī-dē-t* 'shone' imper. *ḍi-dī-hi*, cp. *ḍīp-ya-tē* perf. *ḍiḍipē* part. *ḍīp-ta-s*. On the analogy of such as these arose forms like *dhā-paya-ti* from *dha-* 'to set, place', *snā-pāya-ti* from *snā-* 'to wash', *kṣē-paya-ti* (beside *kṣay-āya-ti*) from *kṣi-* 'to stay, dwell', *ar-pāya-ti* from *ar-* 'to raise oneself'.

Then again *smāpaya-ti* beside *smāy-aya-ti* from *smi-* 'to smile', *māpaya-ti* instead of \**māy-aya-ti* from *mi-* 'minuere', *adhy-apaya-ti* beside *praty-āyaya-ti* from *i-* 'to go'. There were two causes for this set of forms. Firstly, the participles came in contact, *smi-ta-s smi-tvā* seeming to be parallel with e. g. *sthi-tā-s sthi-tvā*; secondly, *pāy-āya-ti* 'gives to drink'

1) Compare now Per Persson's *Wurzelerweiterung* pp. 49 ff. In this work *p* is taken to be a root determinative in many words where we have regarded it as part of the root proper, as in Skr. *sārpa-ti* Lat. *serpō*, which the writer derives from the root of Skr. *sār-a-ti* 'moves, flows'.



(beside *pī-tā-pāy-a-tē*) was compared with *pā-paya-ti* 'gives to drink' (from *pā-ti*), and *gāy-aya-ti* 'makes sing' (beside *gī-tā-gē-ṣṇa-*) compared with *gā-paya-ti* 'makes sing' (beside *gā-ti-gā-sya-ti*). Then a further step was taken, and the resemblance of *sṭhi-tā-s* to *vardhi-tā-s* *dīkṣi-tā-s* produced *vardhāpaya-ti* from *vardhāya-ti* 'helps, arouses, causes a pleasant excitement', *dīkṣā-paya-ti* from *dīkṣaya-ti* 'consecrates'; and again we have on the analogy of these *bhūñjāpaya-ti* from *bhōjaya-ti* 'gives to eat' (pres. *bhunák-ti*), and others.

(2) *gl-apaya-ti* 'brings to decay, ruins, exhausts' (beside *glā-pāya-ti* *glā-ti* *glā-ya-ti*) beside opt. *glapē-t* (Whitney, Skr. Roots p. 41), Gr. βλ-έπω 'I look, see' (cp. βαλεῖν ὄμματα or ὄσσε εἰς τι or πρὸς τι),<sup>1)</sup> *✓gel-*. *sn-apāya-ti* 'washes, bathes' (beside *snā-pāya-ti* *snā-ti* *snā-ya-tē*) compared with Lat. *Nep-tūnu-s*. *śr-apāya-ti* 'boils, roasts, burns' (beside *śrā-ya-ti* *śrā-tā-s*) is connected with *su-śrāpa-s* 'easy to cook'; *jñ-apaya-ti* 'instructs' (beside *jñā-paya-ti* *jñā-sya-ti*) beside *jñap-tā-s* 'instructed' *jñap-ti-ṣ* 'attainment of knowledge'. *ml-apaya-ti* beside *mā-pāya-ti* 'makes languid, takes away the elasticity'.

Remark. Other forms with *-ep-* are: Gr. κλ-έπ-τω Lat. *cl-epō* Goth. *hl-ifa* 'I steal' beside O.Ir. *celim* O.H.G. *hilu* 'I hide'; Gr. δρ-έπω 'I break off, cut off, pluck' δρ-έπαρο-ν 'sickle' beside δρ-έ-ω 'I flay'; Lat. *tr-ep-idu-s*, O.C.Sl. *tr-epe-tū* 'to tremble' beside Skr. *tar-ald-s* 'trembling'. Compare the Author, Morph. Unt. I 40, 48, 49; Per Persson, Wurzelw. 50 ff.

§ 798. A Denominative *éjo*-formation like Skr. *mantrāya-tē* (§ 793 p. 326) can only be definitely maintained for Sanskrit; we know nothing of the Old Iranian accent, and therefore cannot say whether Avest. *frayrāraye-iti* 'wakes up' would answer to a Skr. *\*grārāya-ti* or *\*grārāyá-ti*. Other examples from Sanskrit are: *ṛtāya-nt-* 'behaving in due form and order' from *ṛ-tā-m* 'order, rite', *arthāya-tē* 'allows oneself to be persuaded' from *ár-tha-m* 'goal, business'; *pālāya-ti* 'watches, protects' from *pā-lā-s* 'guardian' is used in Sanskrit as causal

1) βλ-έπαορ seems to be a transformate of γλ-έπαορ, which comes from another root, on the analogy of βλέπω.

of *pā-ti*, and *ghātaya-ti* 'causes to be killed, kills' (aor. *a-jīghata-t*) from *ghā-ta-s* 'blow, killing' as causal of *hān-ti*.

It may be mentioned that when a root-final *k*-sound is not changed to *c* before *-aya-*, this proves the form to be denominative; for we have seen in vol. I § 445 p. 331 that a *k*-sound must become *c* before *-eio-* in protoethnic Aryan, as it does in *rōcāya-ti*. We know therefore that *mṛgāya-tē* 'sets on the trail of a quarry' is derived from *mṛgá-s* 'wild animal, game', *tarkāya-ti* 'conjectures' from *tarka-s* 'guess', and so with others.

§ 799. In Sanskrit, the present in *-āya-ti* served as the foundation for a desiderative formation in *-ayiṣa-ti*, as *lu-lōbhayiṣa-ti* from *lōbhāya-ti*.

The passive is formed with *-yá-tē*, *-ayu-* being dropt; e. g. *bhāj-yá-tē* from *bhājaya-ti*. How this passive originated is not at all clear. It may be supposed that it had no special connexion properly with the *éio*-present, any more than had the aorist of Class IV (§ 548 p. 105).

§ 800. Armenian. There are no clear traces of this *éio*-group, which appears to have been absorbed into the class of verbs ending with *-em*. For instance, *lizem* 'I lick' may answer equally well to Skr. *lēhāya-ti* or to Gr. *λείχω*. Compare § 774<sup>a</sup> p. 293, on *gorcem* etc.

§ 801. Greek. Here this *éio*-class ran into one group with the denominative present in *-e-íō*, such as *φιλέω* from *φίλο-ς*. Hence arose *φορήσω ἐφόρησα* etc., following *φιλήσω ἐφίλησα* (§ 773 p. 290). Hence again, in the present itself, Lesb. *ποθήω* like *ἀδικήει* (§ 775 p. 293), and *φόρημι* like *τίλημι* (§ 589 p. 131).

I arrange the forms about to be cited according as they had one or other of the two original functions of this class (§ 791 p. 324).

Causal (or Factitive). *τορέω*, (*F*)*οχέω*, *φοβέω*, *σοβέω*, see § 794 pp. 326 ff.

Intensive (or Iterative). *φορέω*, *σεέω* (*ἐσσοημένον* Hesych.), *ποτέομαι*, see *ibid*. *ὀχέω* 'I hold fast, hold out, hold' for *\*σοχέω*

beside *ἔχω*: Skr. *ut-sāhaya-ti* 'helps some one to endure, strengthens, gives heart'. *ποθέω* 'I desire' beside *θέσσεσθαι* Avest. *jaidye-iti* √ *ghedh-* (§ 706 p. 234): O.Ir. *no guidiu* 'I pray' first for \**godiu*. *στροφέω* 'I turn round and round' beside *στρέφω*. *τροπέω* 'I turn, twist' beside *τρέπω*. *ροφέω* 'I swallow' beside Lith. *sreb-iù* √ *srebh-*; Lat. *sorbeō* seems to be an *éio*-form with weak grade of root, like *jubeō* Skr. *gṛbhāya-ti*, and others (§ 790 p. 323). *βρομέω* 'I hum, buzz' beside *βρέμω*. *σκοπέω* 'I watch, look at, ponder' beside *σκέπτομαι*. So perhaps *ὀρχέομαι* 'I hop, spring, jump, tremble, quake' beside *ερχομαι* 'I go'; in that case the word will be akin to Skr. *ṛghāyā-ti* 'quakes, throbs'. *ώθέω* 'I push': cp. Skr. *vadhaya-ti* 'strikes down' Avest. *vādaye-iti* 'knocks back'; *ώθέω* will be equivalent to Skr. *badhaya-ti* 'subdues', if in this word *b* is for *v-* (cp. p. 225 footnote 1).

Looking at these verbs in *-εω* from the Greek point of view only, it must be admitted that they mostly look like derivatives from substantives; cp. *φορέω* *φόρος*-, *ποθέω* *πόθος*-, *στροφέω* *στροφή* and so forth. However, it can hardly be doubted that they had their origin rather in this *éio*-class, in as much as the earliest verbs of the kind ended in *-έϊδ*. After the Greek verb had lost the original Idg. accent (cp. § 527 with the Rem., p. 89), present stems in *-έϊδ* and denominatives in *-ε-ϊδ* were bound to run together.

However, another possibility must not be forgotten: to wit, that before the time in question some few denominative causals, of the type of Skr. *mantrāya-ti* (§ 793 p. 326, § 798 pp. 334 f.) may have been formed.

*-εω* is not uncommon after present formative suffixes (cp. § 792 p. 325). So far as one can see, the new verb meant much the same as the old unextended verb.

*εἰλέω* 'I press' beside *εἶλω* for \**fel-νω* (§ 611 p. 150). Ion. inscr. conj. *βουλέωνται* beside *βούλομαι* 'I wish' for \**bol-νο* (§ 611 p. 150). *πιτ-ρέω* 'I fall' beside *πίτ-νω*, whose preterite *επιτρων* became aorist by contrast with *πιτρéné* (see Curtius, Verb<sup>2</sup> 1 268, II 12); *ι* in the root syllable instead of *ε* (√ *pet-*)

as in *κίρ-νῆ-μι* etc., § 602 p. 144. *δαμνέι* · *δαμάζει* (Hesych.) beside *δάμ-νῆ-μι*. *ἰκνέομαι* 'I arrive' beside Hom. *ἰκάνω* for \**ἰκ-ανφω* § 652 p. 187. *οἶχ-νέω* 'I go, go away, I am off'. Cret. *ἀγ-νέω* 'I lead, bring'.

*ὀλιγο-δρανέω* 'I am faint, weak' beside *δρ-αίνω* (§ 621 p. 159) like Skr. *iṣ-an-āya-nta* beside *iṣ-an-yá-ti* (§ 796 p. 332).

With Skr. *pi-nv-āya-ti* § 796 p. 332 may be compared the following. *ἀγίνεω*, beside *ἀγίνω* 'I lead, bring' for \**ἀγί-νφω*. *ἐξίνει*, beside *ἐξίνε-ν* for \**zgi-nuō*. See § 652 p. 187. Perhaps also *δινέω* 'I eddy' beside *δίνω*, and *θύνέω* 'I move wildly, storm' beside *θύνω*, see *loc. cit.*; but still these may be denominatives, derived later from *δῖνο-ς* and *θῦνο-ς*; *θύνέω* moreover may be identified with Skr. *dhū-n-āya-ti* (§ 796 p. 332). We are still quite in the dark whether *-nu-éiō* or *-ne-íō* (*-ne-íō*) is to be assumed for *κινέω* 'I move from its place' beside *κί-νν-μαι*, *βύνέω* 'I stop up' beside *βύνω* and *βύω* fut. *βύσω*, *βῖνέω* 'coeo' beside Skr. *ji-nā-ti* 'overpowers, oppresses' partic. *ji-tá-s*.

*πεκτέω* beside *πέκτω* 'I comb', § 680 p. 212.

*γηθάέω* beside *γῆθουμαι* 'I am glad' seems to fall here along with Lat. *gaudeō* for \**gavideō*, § 694 p. 223. *μιννθάέω* (Hippocr.) beside *μινύ-θω* 'minuo'.

*μνζέω* (Hippocr.) beside *μνζώ* 'I suck'. *χρηόμαι* (Chalc. *χρηείσθω* Boeot. *χρειεῖσθῃ*) and Gort. *ληῖω* (for \**ληέω*) beside *χρηόμαι* \**λήω* perhaps like Skr. *pyāy-āya-ti* beside *pyā-yā-tē* 'swells', see § 737 p. 263.

These forms in *-εω* are also found in association with present stems which have no special characteristic, as *ἐλκέω* beside *ἐλκω* 'I pull'.

Now comes the question — are all these forms with *-εω* to be brought into close connexion with the Idg. *-éiō*, and did they originally have an Intensive or Frequentative meaning? We saw in § 578 p. 119, § 756.4 p. 275, that from the very earliest period non-present forms with an *ē*-suffix occur side by side with present forms which have no *ē*-suffix; as *μελήσει*

ἐμίλησε μεμέληκε beside μέλει, τυπήσω beside τύπτω. It is therefore possible, that at first the only forms used were, say, ἔλκω ἔλκησω, πέκτω πεκτήσω, and that it was only their *ε*-forms which brought these stems in contact with the *εω*-class, and produced ἔλκείω πεκτέω.

§ 802. *Italic*. On the Latin present inflexion see § 788 pp. 318 f. The part. pass. ends sometimes in *-i-tus*, see § 789 p. 319.

We have already mentioned *moneō*, *torreō*, *mordeō*, *tongeō*, *noceō*, *lūceō*, *foveō*, and *jubeō jubeō*, see § 794 pp. 326 ff.

Besides these there are but few words which can with any certainty be called *éjo*-formations. *spondeō*, beside Gr. σπένδω 'I pour a libation, offer it', mid. 'I make a solemn compact'. *doceō*, beside *discō* for *\*di-tc-scō* (§ 678 p. 210), perhaps from the same root as *decet*, and identical with Gr. δοκέω (cp. Fick, Wtb. I<sup>4</sup> 66, 452). *roveō*, although there are doubts as to its origin (cp. I § 428 c p. 316; Fick, Wtb. I<sup>4</sup> 408; Osthoff, Morph. Unt. v 82). *tondeō*, beside Gr. τένω 'I bite' for *\*τεμ-δω* (§ 695 p. 224). *haereō*: Goth. *us-gáisja* 'I frighten' properly 'I make stiff, or congeal'. Umbrian has *tursitu tusetu* 'terreto' *tursiandu* 'terreantur' from a pres. *\*torséjō*, beside Lat. *terreō* Gr. ἐτερεῖν ἐφόβησεν (Hesych.), all from  $\sqrt{\text{ter-s-}}$ , see § 657 p. 192.

The root syllable has a weak grade in: Lat. *qu-eō*, identical with Skr. *śv-āya-ti*, *ci-eō*, see § 790 p. 323; *sorbeō* beside Gr. ῥογέω, see § 801 p. 336; *jubeō*, parallel stem *jubeō* once found, see § 794 p. 329.

We should also add, it seems, the following: *misceō*, see § 792 p. 325; *augeō*, cp. Lith. *augu* 'I grow'; *suadeō* 'I make a thing acceptable to some one', cp. Gr. ἡδομαι § 690 p. 221.

Remark. It is hardly possible to prove that the *éjo*-formation became denominative in Latin as it did in Germanic and Balto-Slavonic, *dēnseō* 'I make thick' beside *dēnsu-s* is certainly not to be explained like Goth. *fulljan* beside *full-s*, and other such; tempting though it be to draw this parallel. See § 777 Rem. p. 301.

§ 803. Keltic. Only a few examples which are anything like certain.

We have already cited the following: O.Ir. *for-tugim* 'I cover over': O.H.G. *decch(i)u* 'I cover', √*teg-* § 791 p. 325; *ad-suidim* 'I prolong, postpone': Goth. *satja* 'I place', √*sed-* § 794 p. 328; *no rāidiu* 'I speak, say': Goth. *rōdja* (same meaning), *ibid.*; *no guidiu* 'I pray': Gr. *ποθέω* 'I desire, crave for', √*ghedh-*, § 801 p. 337. Further examples: *do-luigim* 'I let off, forgive' perhaps connected with *legaim* 'I fail, perish, go to pieces' (Thurneysen, *Rev. Celt.* vi 316). *luadim im-luadim* 'I set in motion' beside *do-lod* 'I went'. *no-m-mōidim* 'I boast, exult' beside *miad* 'pride, honour'. *guirim gorim* 'I heat, warm' from √*gher-*.

§ 804. Germanic. On the confusion of this type with other present classes see § 781. 2 p. 306. The present inflexion in Gothic may be regarded as regularly growing out of the original one (I § 142 p. 125 f.); but in O.H.G. such forms as 2<sup>nd</sup> sing. *denis* (1<sup>st</sup> sing. *denn(i)u* = Goth. *þanja*) *beizis* (1<sup>st</sup> sing. *beiz(i)u* = Goth. *\*bāitja*) are a re-formation following *hevis* and *suchlike* (1<sup>st</sup> sing. *heff(i)u* = Goth. *hafja*), Class XXVI. The partic. pass. in pr. Germanic ended in *-idā-*, as Goth. *fra-vardīps* stem *-vardida-*, *nasīps* stem *nasida-* O.H.G. *gi-nerit*, see § 789 p. 319.

The class was productive, from proethnic Germanic onwards, in the Causal or Factitive use, where the primary verb has some simple meaning. Only a few examples, as O.H.G. *decch(i)u* 'I hide', still keep the Idg. Intensive or Frequentative meaning (§ 791 p. 324); but this meaning very early became so weak, that soon no difference was felt between the original verb and the secondary verb in *-éjo-*, for which reason the former was generally dropt altogether out of use.

Goth. *varja* O.H.G. *weriu* 'I hinder, guard': Skr. *vārāya-ti*, see § 795 p. 330. O.H.G. *zeriu* O.Sax. *teriu* 'I destroy, tear to pieces': Skr. *dārāya-ti* 'makes burst, splits'. Goth. *valja* O.H.G. *well(i)u* 'I choose': Skr. *pra-vārāya-ti*, see § 794 p. 327.

Goth. *uf-panja* 'I stretch out' O.H.G. *denn(i)u* 'I stretch': Skr. *ā-tānaya-ti*, see § 794 p. 327. O.H.G. *wenn(i)u* O.Icel. *ven* (inf. *venja*) 'I accustom': Skr. *sq-vānaya-ti* 'makes inclined, accustoms to', √ *yen-* 'to like'. O.H.G. *flouw(i)u* 'I rinse' (2<sup>nd</sup> sing. *flewis*, cp. Braune O.H.G. Gr.<sup>2</sup> pp. 84, 253): Skr. *plāvaya-ti* 'floods, pours over', Serv. *plovi-ti* 'to make flooded', √ *pleu-* 'flow, swim'. Goth. *fra-wardja* 'I bring to nought, destroy, disfigure', O.H.G. *wert(i)u* 'I destroy': Skr. *varīaya-ti* etc., see § 794 p. 327. Goth. *marzja* 'I hurt, vex', O.H.G. *merr(i)u* 'I hold back, hinder, disturb, mislead' (orig. 'cause any one to make an oversight'): Skr. *murṣaya-ti* 'looks after, carries off, lets alone' (*mṛṣya-ti* 'forgets, neglects, bears patiently'), √ *mers-* 'forget, take no notice of'. O.H.G. *derr(i)u* 'I make dry, wither up': Skr. *tarṣāya-ti* etc., see § 794 p. 327. Goth. *ga-tarhja* 'I mark out, blame': Skr. *darśāya-ti* 'shows', √ *derk-* 'see'. Goth. *uf-rakja* 'I reach up', O.H.G. *recch(i)u* 'I reach, stretch out' from √ *reġ-* (Gr. *ῥέγω*). O.H.G. *(h)rett(i)u* 'I tear away, rescue': Skr. *śrāthaya-ti*, see § 794 p. 327. Goth. *þraŋja* 'I run', beside Gr. *τρέχω* 'I run' (fut. *τρέξομαι*) from √ *threkh-*<sup>1)</sup> O.H.G. *blecch(i)u* 'I make visible, show': Skr. *bhrājaya-ti*, see § 794 p. 327. Goth. *lagja* O.H.G. *legg(i)u* 'I lay': O.C.Sl. *loži-ti*, see § 794 p. 327. Goth. *þagkja* O.H.G. *dench(i)u* 'I ponder, think': Lat. *tongeō*, see § 794 p. 328; the irregular pret. *þahtu dahta* partic. *\*þaht-s gi-daht* (variant *gi-denkit*) — for *aō* becoming *ā* see I § 214 p. 181 — arose on the analogy of the corresponding preterite of *þugkja dunch(i)u* (Goth. *þūhta* etc.), which verb we have placed in Class XXVI (§ 722 p. 252); it is true *þagkja* may also be placed in this class, as it may come from *\*tṛg-iō*, which would have a grade of root shown apparently in Osc. *tangin-om* 'sententiam' (not so Bartholomae, Bezz. Beitr. xvii 123). O.H.G. *blent(i)u* 'I darken, blind': O.C.Sl. *blādi-ti* 'to go astray', orig. transitive like

1) We must believe that the root is *threkh-*, not *thregh-* (I § 553 p. 406), because of O.Icel. *þræll* for *\*þráχ-ila-*. Then the Gothic verb, like *fra-wardja* and *marzja*, shows in its root-final the regular voiced consonant.

Mod.Sloven. *bluditi* 'to lead astray, deceive' (Miklosich, Vgl. Gr. II 437),  $\checkmark$  *bhlendh-*; cp. p. 327 footnote (1). Goth. *us-láubja* O.H.G. *ir-loub(i)u* 'I allow': Skr. *lōbháya-ti* etc., see § 794 p. 328. Goth. *káusja* 'I taste, try': Skr. *jōṣáya-tē*, see § 794 p. 328. Goth. *ráupja* O.H.G. *rouf(i)u* 'I pick, pluck, tear out': Skr. *rōpayati* 'makes a tear, breaks off',  $\checkmark$  *reyp-reyb-* (I § 343 p. 270, § 469.7 p. 345). Goth. *dráusja* 'I make fall, throw', O.H.G. *trōr(i)u* 'I make trickle, shed', beside Goth. *driusa* 'I fall'. O.H.G. *int-swebb(i)u* 'I lull to sleep': Skr. *svāpáyati*, see § 794 p. 328. Goth. *ga-vagja* O.H.G. *wegg(i)u* 'I move': Skr. *vāhaya-ti* etc., see § 794 p. 328. Goth. *us-vakja* 'I wake up', O.H.G. *wecch(i)u* 'I wake': Skr. *vājáya-ti* 'excites, drives on',  $\checkmark$  *ueg-*. O.H.G. *weiz(i)u* *weiz(i)u* 'I give to know, show': Skr. *vēdaya-ti*, see § 794 p. 328; O.H.G. *beiz(i)u* *beiz(i)u* 'I cause to bite, corrode, bait': Skr. *bhēdaya-ti*, see § 794 p. 328; originally *weiz(i)u* *weizis* etc., *beiz(i)u* *beizis* etc., whence by levelling in both directions *weiz(i)u* *weizis* and *weiz(i)u* *weizis*, *beiz(i)u* *beizis* and *beiz(i)u* *beizis* etc. (cp. *flōz(i)u* *flōg(i)u* § 805). Goth. *láisja* O.H.G. *lēr(i)u* 'I teach',  $\checkmark$  *leis-* 'learn'. Goth. *satja* O.H.G. *sezz(i)u* 'I set, place': Skr. *sadáyati*, see § 794 p. 328. O.H.G. *heng(i)u* 'I cause to hang, hang' beside O.H.G. *hahu* 'I hang' for *\*hanhu* (*hiang gi-hangan*). Goth. *uf-hlōhja* 'I make some one laugh', O.Icel. inf. *hlægja*, beside Goth. *hlahja* 'I laugh' (pret. *hlōh*). O.H.G. *fuog(i)u* O.Sax. *fōgiu* 'I make fit, join, tie up': Skr. *pāśáyati*, see § 794 p. 329. O.H.G. *gruoz(i)u* *gruoz(i)u* O.Sax. *grōtiu* 'I address, speak to': Skr. *hrādaya-ti*, see § 794 p. 329.

§ 805. Where the *éjo*-verb, and the primary verb from which it was formed, had come to have a different articulation in the final consonant of the root, through the action of Verner's Law (I §§ 529 f. p. 384 f. § 581 p. 434), the final of the *éjo*-verb was very often in Gothic levelled back to match that of the other. Of the examples cited in § 804, the following show this change: Goth. *-turhja* instead of *\*-targja* following a lost *\*tatrha*, *káusja* instead of *\*káuzja* following *kiusa*, *dráusja* instead of *\*dráuzja*



= O.H.G. *trōr(i)u* following *driusa*, *lāisja* instead of *\*lāizja* = O.H.G. *lēr(i)u* following *lāis* 'knows', *-hlōhja* instead of *\*-hlōgja* = O.Icel. *hlēge* following *hlahja*.

The following *éjo*-forms arose from present stems with some characteristic suffix (see § 792 p. 325).

O.H.G. *hlein(i)u* 'I cause to lean' trans. of *hli-nē-m* O.Sax. *hli-nō-n*, Class XII, § 605 p. 146.

O.H.G. *scein(i)u* 'I make visible, show' beside *scīnu*; *swein(i)u* 'I make disappear, diminish' beside *swī-nu* 'I disappear'; *bi-swell(i)u* 'I make swell, dam up' beside *swīllu*; *scell(i)u* 'I cause to sound, dash in pieces' beside *scillu*: Class XIII, § 614 pp. 151 f.

Goth. *sagqja* O.H.G. *sench(i)u* 'I make sink, push under' beside *sigga*; O.Sax. *thengiu* 'I complete' beside *thīhu* 'I thrive' for pr. Germ. *\*þeŋχō*; O.H.G. *meng(i)u* O.Sax. *mengiu* 'I mingle, mix' beside a pr. Germ. *\*mingō*; O.H.G. *spreng(i)u* 'I make burst, I burst' beside *springu*: Class XVI § 628 pp. 164 ff., § 634 pp. 170 ff. With these were associated *éjo*-formations made from presents with a *t*-suffix and a nasal infix: Goth. *vandja* O.H.G. *went(i)u* 'I turn' from *vinda* ✓ *uej-*; O.H.G. *swent(i)u* 'I make disappear, I annihilate' from *swintu* beside *swī-nu*, see § 634 p. 172, § 685 p. 216.

Goth. *kannja* 'I make know, inform', O.H.G. *ir-chenn(i)u* 'I make know, understand', beside *kann kun-nu-m*, Class XVII § 646 p. 183.

Goth. *ur-rannja* 'I make arise' O.H.G. *renn(i)u* 'I make run, or make run quickly', beside Goth. *rinna*; Goth. *ga-brannja* 'I cause to be burnt up, I burn up', O.H.G. *brenn(i)u* 'I make burn, I burn' beside *brinna*: Class XVIII, § 654 pp. 187 f.

Goth. *ga-vasja* O.H.G. *weriu* 'I clothe' (Goth. *-vasja* instead of *\*-vazja*, see p. 342): Skr. *vāsāya-ti*, from *u-es-* (Class XIX) ✓ *ey-*, see § 794 p. 329.

O.H.G. *frōr(i)u* 'I make freeze' beside *friu-su*, Class XX § 664 p. 197.

O.H.G. *ir-lesk(i)u* 'I cause to be quenched, I quench' beside *ir-lisku*, Class XXII, § 676 p. 208.

Goth. *rōdja* 'I speak, say' beside *-rē-da*: Skr. *rādhaya-ti* etc., see § 794 p. 329; O.H.G. *flōz(i)u flōg(i)u* Mid.H.G. *vlætze vlæze* 'I make flow, cause to swim off, to float (trans.)' (cp. *weiz(i)u weiz(i)u* § 804 p. 341) beside *flu-zu*; Class XXV § 699 p. 225.

§ 806. Denominative *éjo*-verbs (see § 793 p. 326) are common. We have already given some examples found both in Germanic and in Balto-Slavonic (*loc. cit.*), to wit, Goth. *fullja* O.H.G. *full(i)u* 'I fill' from *full-s* 'full' and Goth. *hailja* O.H.G. *heil(i)u* 'I heal' from *hails heil* 'whole, healthy'. Other examples are: Goth. *hauhja* O.H.G. *hōh(i)u* 'I make high, raise aloft' from *hauh-s hōh* 'high'; Goth. *ga-blindja* 'I make blind' Engl. *to blind* (distinguish this from O.H.G. *blent(i)u*, see § 804 p. 340); Goth. *ga-giuja* 'I make living' from *giu-s* (cp. § 794 p. 330); O.H.G. *sterch(i)u* 'I make strong, strengthen' from *starc* 'strong'; *fest(i)u* 'I make fast, fortify' from *festi* 'fast'.

If Germanic did not inherit *éjo*-denominatives from pre-Germanic times, we have to turn for an explanation of their existence in this branch to those instances, where, connected with an old primary causal, there is some adjective having the same grade of root-syllable, as Goth. *gramja* O.H.G. *gremm(i)u* 'to provoke, make angry': O.H.G. *gram* O.Icel. *gram-r* 'angry, provoked'; Goth. *hndivja* 'I lower, degrade' O.H.G. *(h)neig(i)u* 'I bend, incline, sink' tr.: Goth. *hndiv-s* 'low, humble'; O.H.G. *ga-fuog(i)u* 'I make to fit, I join': *ga-fuogi* 'fitting, suiting'. Once these verbs came to be regarded as derived from the adjectives in question, it is easy enough at once to explain new forms like *fullja*.

§ 807. Balto-Slavonic. The original present system, *-eĩð -eĩesi* and so forth, is still represented by the Lith. *v-ejũ* O.C.Sl. *v-ĩjq v-ĩja* 'I wind, turn, twist', as we have already seen in § 788 p. 319. How the place of this series was usurped by Lith. *-au -ai* . . . . ., O.C.Sl. *-jq -ĩši* . . . . . has been explained in § 789 pp. 321 f.

This type was very fertile in Balto-Slavonic; and we meet with both the original meanings, — the Causal, and the Intensive or Frequentative (§ 791 p. 324).

We may mention as further examples Lith. *vartaũ vartý-ti* O.C.Sl. *vraštą vrati-ti*, O.C.Sl. *voljā voli-ti*, *pojā poji-ti*, *ložā loži-ti*, *maštā maši-ti*, *ljublją ljubi-ti*, *vožā vozi-ti*, *davljā davi-ti*, Lith. *isz-manaũ -maný-ti* § 794 pp. 326 ff., Serv. *plovi-m plovi-ti*, O.C.Sl. *blǫdǫ blǫdi-ti* § 804 pp. 339 f. Others are: O.C.Sl. *morjā mori-ti* 'to kill' (causal): Skr. *mārāya-ti* 'makes die, kills', √ *mer-*. Lith. *daraũ darý-ti* 'to make' beside *deriũ* 'I bargain, hire, am of use' (cp. Leskien, Der Ablaut der Wurzels. im Lit., 99), √ *der-*. Lith. *ganaũ ganý-ti* 'to tend (cattle), to pasture' O.C.Sl. *gonjā goni-ti* 'to drive' (freq.), √ *ghen-* 'strike'. Lith. *ramaũ ramý-ti* 'to soften, calm' (causal): Skr. *rāmaya-ti* 'brings to a standstill', √ *rem-*. Lith. *žargaũ-s žargý-ti-s* 'to stretch the legs apart' (freq.) beside *žergiũ* 'I stretch my legs'. Lith. *praszaũ praszý-ti* 'I ask, pray', O.C.Sl. *prošā prosi-ti* 'to ask, pray', √ *prek-*. Lith. *láužau láužý-ti* 'to break' trans. (freq.) beside *láušti* 'to break' trans. O.C.Sl. *bužďa budi-ti* 'to wake' (causal): Skr. *bōdhāya-ti* 'causes to awakes, wakes, makes aware', √ *bhejdh-*. Lith. *snaigo snaigý-ti* 'to snow' (freq.) beside *snik-ti* 'to snow', √ *sneigh-*. Lith. *szvaitaũ szvaitý-ti* O.C.Sl. *svěštā světi-ti* 'to make clear, light up' (causal), √ *kuejt-*. O.C.Sl. *běždā bědi-ti* 'to compel': Goth. *báidja* 'I compel', √ *bhejdh-*. Lith. *maiszaũ maiszý-ti* O.C.Sl. *měšā měsi-ti* 'to mix', √ *mejċ-*; the verb may just as well be derived from *\*moikéiō*, *\*moik-s-éiō* (Skr. *mēkṣaya-ti* cp. Classes XIX and XX, §§ 656 ff. pp. 190 ff.), or *\*moik-sk-éiō* (cp. Lat. *misceō*, see § 792 p. 325). Lith. *sakaũ saký-ti* 'to say', O.C.Sl. *sočā soči-ti* 'to point out': O.H.G. *segg(i)u* 'I say', √ *seq-* (Gr. *ἐν-σπε* Lat. *in-sece*). Lith. *kasaũ kasý-ti* 'to scratch' (freq.), √ *qes-* (O.C.Sl. *česa-ti*). O.C.Sl. *topljā topi-ti* 'to warm, beat' (causal): Skr. *tapāya-ti* 'warms', √ *tep-*. O.C.Sl. *točā toči-ti* 'to make run, make flow, pour' (causal): Avest. *tācayē-iti* 'makes flow', √ *teq-*.

§ 808. New formation from Primary presents, in which a present root-extension of the *ējo*-form has been handed down (§ 792 pp. 325 f.):

Class XVI §§ 635 ff., pp. 172 ff. — Lith. *rāžau rāžy-ti* 'to reach' (freq.) beside *isz-si-ręszti* 'to reach out, extend, resist', √ *reğ-* (Gr. *ῥέγω*). Lith. *grándau grándy-ti* 'to shave, scrape' (freq.) beside *gréndu grėsti* 'to rub, scour', doubtless connected with O.Icel. *krota* 'to dig in, dig down' O.H.G. *chraz-zōn* 'to scratch'. O.C.Sl. *lāčq lāči-ti* 'to separate' beside *lėka* 'to bend', √ *leq-*. O.C.Sl. *kraštq krači-ti* 'to turn, twist' (freq.) beside *krę(t)-nq* 'deflecto', √ *qert-*. O.C.Sl. *izū-sqčq -sqči-ti* 'to make exhausted, dry up' Pol. *w-sqczy-ć* 'to make trickle in' (causal) beside O.C.Sl. *sęk-nq* 'I dry up', √ *seiq-*. O.C.Sl. *trašq traši-ti* 'to shatter' (freq.) beside *tręsq* 'I shatter', perhaps derived from *tr-es-* (Class XX, § 636 p. 174, § 657 p. 192).

Class XX, §§ 657 ff., pp. 191 ff. — Lith. *tąsau tąsy-ti* 'I pull or tear about' (freq.) beside *tę-s-iù*, √ *ten-* (§ 794 p. 329). Compare too the above mentioned O.C.Sl. *tręsi-ti*.

Class XXII, §§ 670 ff., pp. 202 ff. — Lith. *draskaũ draský-ti* 'to tear about' (freq.) beside *dreskiũ* 'I tear' *driskaũ* 'I am torn'. Compare § 807 p. 344, on Lith. *maiszy-ti* O.C.Sl. *měsiti*.

Class XXV, §§ 688 ff. pp. 218 ff. — O.C.Sl. *raždq radi-ti* 'to consider, care for': Skr. *rādhaya-ti* etc., stem *\*rē-dh-* (§ 794 p. 329). Lith. *val̃laũ valdy-ti* 'to rule', beside *vel̃du* 'I rule', stem *uel-dh-*; *skardau skardy-ti* 'to shred, cut about' (causal) beside *skėrdžiu* 'I burst', stem *sger-dh-*; *girdau* 'I give to drink' (causal) beside *geriũ* 'I drink', stem *ger-dh-*; *pūdaũ* 'I cause to rot' (causal) beside *pūv-ũ* 'I rot', stem *pū-dh-*. *spráudaũ spráudy-ti* (freq.) beside *spráudžiu* 'I push forcibly into an interstice', stem *spreu-d-*; *száudaũ száudy-ti* (freq.) beside *száu-ju* 'I shoot', stem *skéu-d-*. With *-dh-* or *-d-*, uncertain which: *maldaũ maldý-ti* 'to beg' (freq.) beside *mel-džiu* 'I beg'; *skáldaũ skáldy-ti* 'to split' (freq.) beside *skelũ* (*\*skel-iũ*) 'I split', both trans. (*skél-du* and *skél-džiu* 'I split' intrans.). Starting from verbs of this kind, the ending *-dau -dy-ti* became independent, like *-dinu -din-ti*, and was the type for others: *spár-dau* 'I kick'

(freq.) beside *spir-iù*, *gy-dau* 'I heal' (causal) beside *gy-jù* 'I get well' (cp. Leskien, *Der Ablaut der Wurzels. im Lit.*, 182 ff.).

Lastly, we may mention once again O.C.Sl. *življa živi-ti* 'to make alive' (causal), beside *ži-vq* 'I live', see § 794 p. 329.

§ 809. Denominative verbs in Lith. *-y-ti* O.C.Sl. *-i-ti* (see § 793 p. 326) are common. Examples found in both Germanic and Slavonic are O.C.Sl. *plūni-ti* 'to fill' and *cēli-ti* 'to heal', mentioned above (*loc. cit.*).

Lith. denominatives such as *jū'stau jū'sty-ti*, a class which is mixed up with the *ā*-denominatives, have been cited already § 782.4 p. 310. Some more Slavonic exx. may be mentioned: *pravlja pravi-ti* 'to make right, direct' beside *pravū* 'right', *oštrja ostrī-ti* 'to point, sharpen' beside *ostrū* 'pointed, sharp', *diplja divi-ti* sę 'to wonder' beside *divo* 'wonder', *dělja děli-ti* 'to divide' beside *dělū* 'part', *darja dari-ti* 'to present' beside *darū* 'a present', *měrja mēri-ti* 'to measure' beside *mēra* 'measure', *kramolja* 'I disturb, confuse' beside *kramola* 'disquiet, noise, uproar'. It must also be mentioned that the Idg. denominatives from *i*-stems, ending in *-i-ǵō*, have run into this Class; see § 782.5 p. 311.

## THE *s*-AORISTS.<sup>1)</sup>

§ 810. We saw in § 485 p. 38 f., and § 655 p. 190, that thematic and non-thematic *s*-Preterites belonged to our Present

1) On the Indo-Germanic *s*-Aorist in general: — The Author, *Zur sigmatischen Aoristbildung im Griech., Ital., Kelt. und Ar.*, *Morph. Unt.* III 16 ff.

Aryan. Whitney, *On the Classification of the Forms of the Sanscrit Aorists*, *Proceed. Amer. Or. Soc.* 1875—76 pp. xviii f. *Idem*, *The siṣ- and sa-Aorists in Sanskrit*, *Amer. Journ. Phil.* VI 275 ff. Bartholomae, *Zur Bildung des sigmatischen Aorists [in Avestic]*, *Kuhn's Zeitschr.* XXIX 288 ff.

Greek. Inama, *Degli aoristi greci*, *Rivista di filol.* II 249 ff. L. Meyer, *Griech. Aoriste*, Berl. 1879. T. H. Key, *On the Formation of Greek Futures and First Aorists*, *Transact. Philol. Soc.* 1861 pp. 1 ff. Leskien, *Die Formen des Futurums und zusammengesetzten Aorists mit*

Classes XIX and XX. The reason why I treat these stems again by themselves has been given in the first of those two places.

Before *-s-* we have (1) either the bare Root, as Skr. *á-dik-š-i á-dik-ša-t* Gr. *ἔ-δix-σ-α* Lat. *dix-s-it*, Skr. *á-dha-s-am* O.C.Sl. *dě-chŭ*, or (2) Root + Suffix of some kind (Root-Determinative, or what not), as Skr. *á-hv-a-s-ta* O.C.Sl. *zŭv-a-chŭ*, Skr. *á-vēd-i-š-am* Gr. *(F)ειδ-ε-(σ)-α* Lat. *vīd-i-s-tis*, Skr. *á-yō-t-s-am* Lat. *jussit* for *\*ju-t-s-e-t* (pres. *yō-dha-ti ju-b-eō*). Under the second heading, a special class is composed of forms like Skr. *ávēdiš-am* Gr. *(F)ειδε-α* Lat. *vidis-tis*, and others

as in den homer. Gedichten, Curtius' Stud. II 65 ff. P. Cauer, Die dor. Futur- und Aoristbildungen der abgeleiteten Verba auf *-ω*, Sprachwiss. Abhandl. aus G. Curtius' Gramm. Gesellsch. pp. 126 ff. G. Mekler, Die Flexion des activen Plusquamperfects, in: Beitr. zur Bildung des griech. Verbums, Dorpat 1887, pp. 43 ff.

Italic. J. V. Netušil, Ob aoristach v latinskem jazykě (The Aorist in Latin), Charkow 1881. Corssen, Kein Aoristus I im Lateinischen, in: Beitr. zur ital. Sprachk. pp. 556 ff. *Idem*, Die synkopierten Formen des Futurum II und Conjunctiv des Perfects auf *-si, -a-ssi, -e-ssi, -i-ssi, ibid.* pp. 523 ff. Ch. Blinkenberg, Om resterne af det sigmatiske aorist i Latin, Kort Udsigt det Kjöbenh. phil. Samf. xxxi. Madvig, De formarum quarundam verbi Latini natura et usu [on *faxō faxim* and the like], Kopenh. 1835 and 36 = Opusc. ac. alt. pp. 60 ff. G. Hermann, De I. N. Madvigii interpretatione quarundam verbi Lat. formarum, Leipz. 1843 = Opusc. viii 415 ff. G. Curtius, De verbi Lat. futuro exacto et perfecti conjunctivo (issued in welcome of the Congress of Philologists), Dresd. 1844. E. Lübbert, Gramm. Stud. I: der conj. perf. und das fut. ex. im älteren Lat., Bresl. 1867. *Idem*, Paralipomena zur Geschichte der lat. Tempora und Modi II [on *faxim* and the like], Archiv f. lat. Lexikogr. II 223 ff. Fr. Cramer, Das lat. futurum exactum, *ibid.* IV 594 ff. P. Giles, The Origin of the Latin Pluperfect Subjunctive and other etymologies, Cambridge Phil. Transact. 1889 pp. 126 ff. — For other works which deal with the lat. *s*-Aorist associated with the Perfect, see under Perfect, § 843.

Keltic. D'Arbois de Jubainville, Du futur sigmatique [in Irish], Mém. d. l. Soc. d. ling. VI 56. Thurneysen, Der *s*-Aorist im Ir., Kuhn's Zeitschr. xxviii 151 ff. H. Zimmer, Die Schicksale des idg. *s*-Aorists im Ir. und die Entstehung des kelt. *s*-Präteritums, *ibid.* xxx 112 ff. Thurneysen, Zu den ir. Verbalformen sigmatischer Bildung, *ibid.* xxxi 62 ff.

Slavonic. Miklosich, Zusammengesetzter Aorist [in Old Slovenian], Sitzungsber. d. Wien. Akad. LXXXI 110 ff.

associated closely with these, such as Skr. *á-yā-s-iṣ-am* Gr. *δειξιαν* for \**δεικ-σ-ε(σ)-ιαν* Lat. *dīc-s-is-tis*. Another subdivision includes the forms with *-s-s-*, as Gr. *ἐσβησσα ἐκάλεσσα* Lat. *vīdissem capessō amāssō* O.Ir. *ro-charus* for \**carāss-*.

#### A. STEMS IN *-s-* AND *-so-*.

##### I. Non-Thematic *s*-stems.

§ 811. Roots of the *e*-series appear in three vowel grades; and the original Idg. division of these grades was as follows.

The Indic. Act. Sing. had the *ē*-grade: as O.C.Sl. *vēs-ū*<sup>1)</sup> Skr. *á-vākṣ-am* from *√ uēgh-*; whether *ē* in Lat. *vēr-i-t* is this *ē* unchanged, is doubtful. The Indic. Act. Plural and Dual, and the whole of the Indic. Middle, had the weak root: as Skr. *á-vīt-s-i* Gr. *ῖσ-αν* from *√ uēid-*. The Conjunctive had the *e*-grade: as Skr. *pákṣ-a-t* Gr. *πέψ-ω* from *√ peq-*, Avest. *var's-a-itī* Gr. *ἐρξ-ω* from *√ uerg-*. The Optative had the weak root; as Skr. *mas-īya* from *√ men-*. With this ablaut compare Skr. indic. *stāú-ti stu-mási stu-tē mārṣ-ti mṛj-ánti*, conj. *stāv-a-t mārj-a-t*, opt. *stuv-i-tá* (§ 494 p. 55).

The Conjunctive stem of this *s*-aorist is identical with the Indicative stem of the XX<sup>th</sup> Present Class; e. g. Skr. *tāsa-t(i)* and indic. *tāsa-ti* = Goth. *pīnsa*, Lat. (fut.) *dīxō* and indic. pret. *dīxi-t dīxi-mus*, so too the conj. Skr. *áy-a-t* and indic. *áy-a-tē* = Lat. *eō* (§ 489 p. 47, § 493 pp. 51 f.).

§ 812. Pr. Idg. Skr. *kṣar-* Gr. *κθαρ-* 'cause to run off, make disappear' (cp. Kretschmer, Kuhn's Zeitschr. xxxi 431): *á-kṣārṣ-am* 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-kṣār*, Gr. *ἐκθάρω* (*ἐκθάρωσα* Lycophron). *√ der-* 'split, flay': Skr. conj. *dārṣ-u-t(i)*, Gr. *ἐδειρα*. *√ bher-* 'carry': Skr. *á-bhārṣ-am*, Gr. *ἐφερσεν* *ἐκύησεν*

1) In the Indicative system of several languages forms of some other inflexion were associated with the non-thematic forms. This will be examined under the headings of the languages in question.

(Hesych.), Lat. conj. *ferrem*. √ *uel-* 'choose, wish': Skr. 1<sup>st</sup> sing. mid. *á-vṛṣ-i* Avest. 1<sup>st</sup> sing. conj. mid. *var's-anē*, Lat. *vellem*. √ *ten-* 'stretch out, lengthen, tighten': Skr. *á-tās-am* 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-tān* mid. 1<sup>st</sup> sing. *á-tas-i* 1<sup>st</sup> pl. *á-tas-mahi*, Gr. *ἐ-τινα*. √ *men-* 'think, mean': Skr. mid. 3<sup>rd</sup> sing. *á-mas-ta* conj. *mās-a-tē* opt. 1<sup>st</sup> sing. *mas-īya*, Lith. 1<sup>st</sup> and 2<sup>nd</sup> pl. injunct. (fut.) *mīs-me mīs-te*. √ *ghen-* 'strike': Skr. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *ghān* (*gh-* instead of *h-* following \**ghas-* = \**ghy-s-*), Gr. *ἐ-τινα*, Lith. injunct. *gīs-me -te* O.C.Sl. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *po-žę*. √ *rem-* 'rest': Skr. *á-ras-am* mid. *á-ras-ta*, Lith. injunct. *rems-me -te* (trans.) and *rims-me -te* (intrans.). Lat. *dēmpsi prōmpsi* opt. *emps-i-m*, Lith. injunct. *ims-me -te* O.C.Sl. *jęs-ŭ*. √ *qeī-* 'to inflict punishment' etc.: Skr. *á-caīṣ-am*, Gr. *ἐ-τεισ-α*. Skr. *kṣi-* Gr. *φθι-* 'destroy': Skr. mid. *kṣēṣ-ta*, Gr. *ἐ-φθεισ-α*. √ *pleu-* 'swim': Skr. mid. *á-plōṣ-ta*, Gr. *ἐ-πλευσ-α*, Lith. injunct. *plāus-me -te* O.C.Sl. *pluch-ŭ*. √ *kļu-* 'hear': Skr. *á-śrāuṣ-am* O.C.Sl. *po-sluchŭ*. √ *terp-* 'satisfy, content': Skr. *á-trāps-am á-tārps-am* (gramm.), Gr. *ἐ-τερον-α*. √ *uert-* 'vertere': Skr. mid. *á-vṛts-i*, Lith. injunct. *verš-me -te* (trans.) and *višs-me -te* (intrans.). √ *serp-* 'serpere': Skr. *á-srāps-am á-sārps-am* (gramm.), and perhaps also mid. *ásṛpta* for \**a-sṛps-ta* (§ 816), Gr. *ἐῖρω-α* (late), Lat. *serps-ī*. √ *derk-* 'see': Skr. *á-drakṣ-am* 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-drak* mid. 3<sup>rd</sup> pl. *á-dṛkṣ-ata* conj. *darkṣ-a-t*, (Gr. *ἐ-δεοξ-άμην* (late). √ *uerḡ-* 'work': Avest. conj. *var's-a-itī*, (Gr. *ἐργ-α*. √ *merḡ-* 'stroke, brush': Skr. *á-mārḁṣ-am*, Gr. *ἀμ'οξ-αι ομόοξ-αι*. √ *melḡ-* 'milk': Gr. *ἀμέλξ-αι*, Lat. *muls-ī*, Lith. injunct. *mīlsz-me -te*. √ *leīḡ-* 'leave': Skr. *á-raikṣ-am* 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-raik* mid. *á-rikṣ-i*, Gr. *ἐ-λειν-α*, Lith. injunct. *līks-me -te*. √ *ueīd-* 'know, learn, find': Skr. mid. *á-vits-i*, Gr. mid. *ἐ-εἶσ-α* 3<sup>rd</sup> pl. act. *ἴσ-αν*, Lat. *vīs-ī* (pres. *vīs* § 662 p. 197), Lith. injunct. *isz-výs-me -te*. √ *leīp-* 'besmear': Skr. mid. *á-līps-i*, Gr. *ἀλείψ-αι*, Lith. injunct. *līps-me -te*. √ *deīk-* 'show': Skr. mid. *á-dikṣ-i*, Gr. *ἐ-δειξ-α*, Lat. *dīx-ī dīx-ō dīx-i-m*. √ *neīḡ-* 'wash': Skr. *á-nāikṣ-am* mid. *á-nīkṣ-i*, Gr. *ἐ-νυψ-α*. √ *steīḡh-* 'climb': Gr. *ἐ-στεῖξ-α*, O.Ir. injunct. 3<sup>rd</sup> sing. *for-tē*. √ *jeyḡ-* 'yoke to, fasten': Skr. *á-yōkṣ-am* and



*á-yāukš-am* (gramm.), Gr. ἄ-ζευξ-α; cp. Skr. *á-yurākṣ-mahi* Lat. *jūnx-ī* Lith. injunct. *jūnks-me -te* § 813. *✓ meug-meyg-* 'strip off, let go': Skr. *á-māukṣ-am* 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-māuk* mid. *á-mukṣ-i* Gr. ἄν-έμυξα, Lith. injunct. *maūks-me -te*; Lat. *ē-mūnxī*. *✓ bheydh-* 'awake, notice': Skr. mid. *á-bhuts-i*, Lith. injunct. *-būs-me -te* O.C.Sl. *bljus-ū*. *✓ uegh-* 'vehere': Skr. *á-vākṣ-am* 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-vāṭ* conj. *vākṣ-a-t*, Lat. *vēx-ī*, Lith. injunct. *vēs-me -te* O.C.Sl. *vēs-ū*. *✓ yedh-* 'to lead': O.Ir. *don-fē* 'let him lead us' for \**vets-t*, Lith. injunct. *vēs-me -te* O.C.Sl. *vēs-ū*. *✓ dhegh-* 'burn': Skr. *á-dhākṣ-am* *á-dhāk* conj. *dhākṣ-a-t(i)*, Lith. injunct. *dēks-me -te* O.C.Sl. *žach-ū* for \**žech-ū* (I § 76 p. 66) beside *žega* for \**dega* (§ 522 pp. 85 f.). *✓ sed-* 'sedere': Skr. conj. *sāts-a-t*, Gr. *ἕσα-α*, Lith. injunct. *sēs-me -te*. *✓ peq-* 'coquere': Skr. conj. *pākṣ-a-t*, Gr. ἑ-πεψ-α, Lat. *coxī* for \**quex-ī*. *✓ seq-* 'to be with, follow': Skr. mid. *á-sakṣ-i* conj. *sākṣ-a-t*, Lith. *sēks-me -te*. *✓ reg-* 'regere': Gr. οῤέξ-αι, Lat. *rēx-ī*, O.Ir. 2<sup>nd</sup> sing. *comēir* for \**cóm-ex-rex-s*. *✓ leg-* 'legere': Gr. ἑ-λεξ-α, Lat. *-lēx-ī*. *✓ plek-* 'fold': Gr. ἑ-πλεξ-α, Lat. *plēx-ī*. *✓ ed-* 'eat': Lat. conj. *ēss-e-m*, Lith. injunct. *ēs-me -te* O.C.Sl. *jas-ū*. *✓ dhē-* 'set, place, lay': Skr. *á-dhas-am* mid. *á-dhiṣ-i*, Lat. conj. *con-derem*, Lith. injunct. *dēs-me -te* O.C.Sl. *dēch-u*. *✓ spē-* 'help onwards, further': Avest. conj. *spārah-a-iti*, Lith. injunct. *spēs-me -te* O.C.Sl. *spēch-ū*. *✓ dō-* 'give': Skr. mid. *á-diṣ-i* conj. *dās-a-t*, Lat. conj. *dar-e-m*, Lith. injunct. *dā's-me -te* O.C.Sl. *dach-ū*; compare also Alban. *Jašë* 'I gave' (G. Meyer, Kurzgef. alb. Gr., 38). *✓ stā-* 'stand': Skr. mid. *á-sthiṣ-i* Avest. conj. *stārah-a-p*, Gr. ἑ-στῆσ-α 3<sup>rd</sup> pl. Hom. ἑ-στασ-αv, Lat. conj. *stār-e-m*, Lith. injunct. *stós-me -te* O.C.Sl. *stach-ū*.

The following examples are a group by themselves, having peculiar vocalism in the root (*a*, *i*, *f*). *✓ bhey-* 'be, become': Gr. ἑ-φῶσ-α, conj. (fut.) Umbr. fust *fust* Osc. *fust* 'erit', Osc. conj. *fusíd* 'foret', Lith. injunct. *būs-me -te* O.C.Sl. *bych-ū*; cp. fut. Avest. *būšyēiti* etc. § 748 p. 271. *✓ dhey-* 'shake': Skr. mid. *á-dhūṣ-ta*, Gr. ἑ-θῦσ-α. *✓ gej-* 'live': Lith. injunct. *gýs-me -te* (inf. *gý-ti* pres. *gy-jù*) O.C.Sl. *žich-ū* (inf. *ži-ti*

pres. *ži-va*). Skr. 3<sup>rd</sup> pl. *á-kirš-ata* from *kar-* 'scatter'. Gr. ἰ-στροωσ-α from στερε- 'sternere'.

§ 813. Forms with the root-suffixes *-a-*, *-ē-* *-ō-* (§§ 579 ff. pp. 121 ff., §§ 734 ff. pp. 261 ff.). *\*dr-a-* 'run': Skr. conj. *drās-a-t*, Gr. ἀπ-έδροαα (late). *\*tr-a-* 'to press through, succeed in traversing': Skr. 1<sup>st</sup> pl. mid. *á-trās-mahi* Avest. 2<sup>nd</sup> pl. mid. *brāz-dam*, Lat. conj. *in-trārem*. *\*gh(i)ā-* 'hiare': Lat. conj. *hiār-e-m*, Lith. injunct. *žiós-me -te*. *\*gh(u)ā-* 'call': Skr. mid. *á-hvās-ta*, O.C.Sl. *zūvach-ū*. *arā-* 'plough': Lat. conj. *arār-e-m*, O.C.Sl. *orach-ū*. *\*pl-ē-* 'fill': Skr. *á-prās-am* 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-prās*, Lat. conj. *-plēr-e-m*; whether Gr. ἐπλησα comes in here is doubtful (see § 750.3 p. 272). *\*sn-ē-* 'weave, spin, sew': Gr. ἔ-νησ-α, Lat. conj. *nēr-e-m*. *\*bhs-ē-* 'chew, devour': Skr. *á-psās-i-t* (gramm., cp. § 816), Gr. ἔ-ψησ-α. *\*gn-ē* *gn-ō-* 'learn, know': Skr. *á-jñās-am*, Gr. ἀν-έγνωσα, O.C.Sl. *znach-ū*. *\*uid-ē-* 'see': Lat. conj. *vidēr-e-m*, Lith. injunct. *pa-vydēs-me -te* O.C.Sl. *vidēch-ū*. *\*rudh-ē-* 'blush': Lat. conj. *rubēr-e-m*, O.C.Sl. *rūdēch-ū*. Lat. conj. *favēr-e-m*, O.C.Sl. *govēch-ū* 'veneratus sum', cp. § 590 p. 132. With these aorists are associated the *s*-preterites of the later denominative group, as Gr. ἐ-τίμασ-α Lat. conj. *plantār-e-m* Lith. injunct. *lankós-me* O.C.Sl. *lākach-ū* (cp. § 769 p. 286), Gr. ἐ-φίλησ-α Lat. *claudēr-e-m* Lith. *gūdēs-mé-s* O.C.Sl. *cělēch-ū*, Gr. ἐ-κόντισ-α Lat. *fīnīr-e-m* Lith. *dalýs-me* O.C.Sl. *gostich-ū*, Gr. ἐ-δάκρυσ-α, Gr. ἐ-μίσθισ-α Lith. *jākū's-me* (cp. § 773 p. 290 f.). Venetian *zonas-to* 'donavit' (cp. p. 53 footnote 2).

As this *s*-formation must be regarded as original for stems with the suffixes *-ā-*, *-ē-* *-ō-*, so too for certain roots with a dental suffix. From *gei-t-* 'to observe' (§ 680 p. 212): Skr. 3<sup>rd</sup> sing. *á-cait*, O.C.Sl. *čis-ū*. From *iey-dh-* 'disturb, set moving, drive' (§ 689 p. 219 f.): Skr. *á-yōts-am* *yuts-mahi*, Lat. *juss-i* O.Lat. *jous-ī*.

Of the remaining *s*-forms with roots having some extra suffix, those which are associated with Classes XV and XVI deserve particular mention. Skr. 1<sup>st</sup> pl. mid. *á-yurəkš-mahi* Lat. *jūnx-ī* Lith. *jūnks-me* beside Skr. *yurək-tē* Lat. *jungō*

Lith. *jūngiu*, from *√jeug-* 'yoke, join'; cp. the associated forms Skr. *á-yōkṣ-am* Gr. *ἔ-ζευξ-α* § 812 p. 349. Gr. *ἔ-πλαγξ-α* Lat. *plānx-i* beside Gr. *πλάζω* for *\*πλαγγ-ω* Lat. *plangō*, from *√plaq-* *plag-* 'strike': cp. Gr. *ἔ-πληγξ-α* Lith. *plāks-me*. Of course these examples, with many more from Greek, Latin, or Baltic, may all be regarded as new analogical formations in the separate languages.

§ 814. Aryan. First, a few more examples to supplement those given in §§ 812 and 813. *√dher-* 'hold fast': Skr. *á-dhārṣ-am* (gramm.), Avest. 3<sup>rd</sup> sing. *dār's-t dōr's-t* (*ō* for *a*) O.Pers. 1<sup>st</sup> sing. mid. *a-darš-iy* (O.Pers. *darš-* may be either *\*dhers-* or *\*dhys-*). *√per-* 'bring across, transfer, translate': Skr. conj. *pārṣ-a-t(i)*: Gr. *ἔ-πειρ-α*. *√uen-* 'win, conquer': Skr. mid. *vās-i* conj. *vās-a-t(i)* opt. *vas-i-mahi vās-i-mahi*, Avest. Gathic conj. *vəəgh-a-itī* = Skr. *vāsati*. *√gem-* 'go': Skr. mid. *á-gas-mahi á-gas-mahi*, Avest. conj. Gath. *jəəgha-itī*. Skr. *yam-* 'cohibere': *á-yāṣ-am* 3<sup>rd</sup> sing. *á-yān* conj. *yās-a-t(i)*. Ar. *naḥ-* 'lead': Skr. *á-nāṣ-am* mid. *á-nēṣ-i* conj. *nēṣ-a-t(i)*, Avest. conj. *naēṣ-a-p*. Skr. *jaḥ-* 'conquer': *á-jāṣ-am* mid. *á-jēṣ-i* conj. *jēṣ-a-t(i)*. Skr. *dhī-* 'notice': Avest. 2<sup>nd</sup> sing. *dāiš*, cp. partic. *dāšemna-* Skr. *dhīṣamāna-s* § 833. Avest. *praṇ-* 'nourish' (*pr-u-* beside *pr-ā-*, cp. § 579 p. 121 f.): 2<sup>nd</sup> pl. act. *praōš-ta* 3<sup>rd</sup> sing. mid. *praōš-ta*. Skr. *sarj-* 'let go': Skr. *á-srākṣ-am* mid. *á-sṛkṣ-i* conj. *sṛakṣ-a-t(i)*. *√prek-* 'ask': *á-prākṣ-am* mid. *á-praṣ-ṭa*, Avest. mid. *fraš-i fraš-ta* imper. *ferāšva*. Skr. *chand-* Avest. *sand-* 'appear': Skr. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-chān* conj. *chantṣ-a-t(i)*, Avest. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *sas*. *√deik-* 'show, point': Skr. mid. *á-dikṣ-i*, Avest. opt. *diṣ-yā-p*: Gr. *ἔ-δείκ-α* etc., see § 812 p. 349. Skr. *viṣ-* 'enter': 1<sup>st</sup> pl. mid. *á-vikṣ-mahi*. *√ueq-* 'speak': Avest. conj. *vaxṣ-a-p*. *√ped-* 'go': mid. *á-pats-i*. *√bhag-* 'enjoy': Skr. *á-bhakṣ-am* 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-bhak* mid. *á-bhakṣ-i* conj. *bhakṣ-a-t(i)*, Avest. 3<sup>rd</sup> sing. mid. *baxṣ-ta*. *√dhē-* 'place' and *dō-* 'give': Skr. *á-dhās-am á-dhiṣ-i á-diṣ-i das-a-t(i)*, Avest. 2<sup>nd</sup> sing. opt. mid. *dah-i-ša*: Lat. *con-derem* etc., see § 812 p. 350. *√kō-* 'sharpen, cut':

Avest. 2<sup>nd</sup> pl. *saz-dūm*. Skr. *hā-* 'go, yield' (*jā-hā-ti ja-hi-mas*): *á-hās-am* 3<sup>rd</sup> sing. *á-hās* 1<sup>st</sup> pl. *á-hās-ma*.

§ 815. There are many deviations in Sanskrit and Avestic<sup>1)</sup> from the original distribution of these three vowel grades, as set forth in § 811.

The weak stem (as Skr. *ta-s-* from  $\sqrt{\text{ten-}}$ ) is hardly found outside its original sphere; but no longer in the plural and dual indic. act., only in the Indic. Middle and the Optative: e. g. Skr. *á-dhiṣ-i dhiṣ-īya á-gas-mahi mas-īya*, Avest. *a-mēh-maidi diṣ-yā-ḥ*. Irregular: Skr. 2<sup>nd</sup> sing. conj. mid. *dfkṣ-a-sē* instead of *\*drakṣ-a-sē*.

In Sanskrit the *ā*-grade (as *tā-s-*) spread from the Sing. indic. act. to the Plural and Dual; e. g. *áchāntsur ájāiṣma úbhārṣṭam* following the sing. *áchāntsam* etc.; cp. *ádhāma* instead of *\*á-dhi-ma* following *á-dhā-m* (§ 495 p. 55), *spar-tam* instead of *spr-tam* (§ 499 p. 62), and the like. But beyond this line Sanskrit has very few other examples of *ā*; one is mid. *áyās-i*. In the Gatha dialect *ā* is quite restricted to its original sphere. But in later Avestic it has crept into *nāš-ī-ma*, if this be the optative to an indic. *\*nāš-em* (O.C.Sl. *nēs-ū*); cp. Bartholomae, Stud. idg. Spr., II 166.

The *a*-grade (as Skr. *tā-s-*) spread from the Conjunctive, where it is still the usual form in Sanskrit and Avestic, through the whole Indicative and Optative moods; and in particular it occurs with the weak stem; e. g. indic. 3<sup>rd</sup> sing. Skr. *á-mas-ta* Avest. *mas-tā* opt. Skr. *mas-ī-māhi* (variant, Avest. Gath. *a-mēh-maidi* Skr. *mas-īya*) following the conj. Skr. *más-a-tē*, Skr. 1<sup>st</sup> pl. *jēṣ-ma* (beside *á-jāiṣ-ma*), Avest. Gath. 2<sup>nd</sup> pl. *praoš-tā*, 3<sup>rd</sup> pl. *vērogh-en*; within the orig. sphere of the *a*-grade, Skr. *á-ras-am á-yōkṣ-am*.

§ 816. In Sanskrit, the 2<sup>nd</sup> and 3<sup>rd</sup> sing. indic. act. became identical by regular change (*ájaiṣ* = *\*a-jāiṣ-ṣ* and *\*a-jāiṣ-ṭ*); and if a consonant preceded the aorist sign, the aorist sign was dropt as well as the personal ending (*árāik* = *\*a-raikṣ-ṣ* and

1) Here we have to disregard Old Persian, from lack of material.

\**a-raikṣ-t*), and sometimes this was done even to the root-final (*á-čan* = \**a-chants-s* and \**a-chānts-t*). The inconvenience thus caused served to root the forms with *-s-i-ṣ* *-s-i-t* firmly in later Vedic, and these are the only ones used in classical Sanskrit (except *bhaiṣ* in the phrase *mā bhaiṣ* 'fear not'); e. g. *á-jaiṣ-i-ṣ* *-i-t*. These endings were borrowed from the *siṣ*-aorist (§ 839). For instance, *áyāsi-ṣ* *áyāsi-t* belonged originally to the series *áyāsiṣ-am* *áyāsiṣ-ma* etc., next displaced 2<sup>nd</sup> and 3<sup>rd</sup> sing. *áyās* (which belonged to the 1<sup>st</sup> sing. *áyās-am*); and the relation between *áyāsi-ṣ* *-t* and *áyās-am* produced *ájaiṣi-ṣ* *-t* beside *ájaiṣ-am*, *ábharṣi-ṣ* *-t* beside *ábharṣ-am*, and so forth.

A few times the 2<sup>nd</sup> sing. in *-aiṣ* (for \**-aiṣ-ṣ*) produced a 3<sup>rd</sup> sing. in *-ai-t*, as *ánait* by complementary analogy from *ánaiṣ* (*nī-* 'to lead').<sup>1)</sup> As this formation touched only roots with an *i*-vowel, it may be that the type was set by preterites like *áj-ai-t* beside *áj-ai-ṣ* from *aj-* 'agere' (§ 572 p. 114).

The Sanskrit grammars class under the *s*-aorist some forms of the 2<sup>nd</sup> and 3<sup>rd</sup> sing. which more properly belong to our Present Class I; such are *á-kṛthas* and *á-kṛta*, which by their structure belong not to *á-kṛṣ-i* *á-kṛṣ-mahi* but to *á-kr-i* *á-kr-ata*. The reason of this confusion was that in a certain number of consonantal roots the 2<sup>nd</sup> and 3<sup>rd</sup> sing. of both these series had become indistinguishable; e. g. *áchitthas* *áchitta* in the systems of *á-chid-i* (*á-chēd-i*) and *á-chits-i* both (cp. 2<sup>nd</sup> pl. *áchantta* for \**a-chants-ta*, I § 557. 3 p. 413). Compare also the 2<sup>nd</sup> pl. *ámugdhvam* from *muc-* 'to let go', which may belong equally well to the aorist stem *muc-* (precative *muc-iṣṭa*) or to the aorist stem *mukṣ-* (3<sup>rd</sup> pl. *mukṣ-ata*).

§ 817. *s*-aorists from Roots with characteristic, or from Present Stems.

Forms with the suffixes *-a-*, *-ē-* *-ō-* have been cited in

1) Analogous formations outside the *s*-aorist are collected by Joh. Schmidt in Kuhn's Zeitschr. xxvi 403. Compare further 1<sup>st</sup> sing. *uchinam* (Maha-Bh.) beside 3<sup>rd</sup> sing. *a-chinat* = \**a-chinat-t* from *chid-* 'to cut off'.

§ 813 p. 351; add to those Skr. *á-yās-am* conj. *yās-a-t(i)* from *y-ā-* 'to go', *á-dhyās-am* from *dhy-ā-* 'to think'.

With the suffix *-ī- -āi-* (§ 498 pp. 61 f.); Skr. *á-grabh-ī- -ś-am á-grah-āi-ś-am* beside *á-grabh-ī-t á-grh-ī-tām* from *grabh-* 'to seize' (§ 574 p. 116).

Skr. *á-yuṣṭ-ś-mahi* from *yuj-*, see § 813 p. 351. Skr. *á-stamps-am* beside *stambha-tē* 'fortifies or strengthens itself', *√ stebh-*, see § 629 p. 166.

O.Pers. 3<sup>rd</sup> sing. *a-kū-nau-š* 'he made' *a-durš-nau-š* 'he durst' come from *nu-* presents (§ 640 p. 178). And so doubtless 3<sup>rd</sup> sing. *-āiš* 'he went' 3<sup>rd</sup> pl. *-āiša* arose in Persian itself in association with the present stem *aī-* (imperf. *-āy-am*), and is therefore not an orig. *s*-aorist as might be supposed from Skr. 3<sup>rd</sup> sing. mid. *adhy-āišṭa* (gramm.). The origin of these new forms lies perhaps in certain pairs of imperfect forms; 2<sup>nd</sup> sing. *\*āiš* 3<sup>rd</sup> sing. *\*āi*, 2<sup>nd</sup> sing. *\*akūnauš* 3<sup>rd</sup> sing. *\*akūnau* running parallel to 2<sup>nd</sup> sing. *\*abara* 3<sup>rd</sup> sing. *abara*, 2<sup>nd</sup> sing. *\*adada* 3<sup>rd</sup> sing. *adadā*, and the like. If there were connected aorist forms such as 2<sup>nd</sup> and 3<sup>rd</sup> sing. *\*a-nāiš* = Skr. *á-nāiš*, the above 2<sup>nd</sup> sing. in *-š* might easily be looked upon as an *s*-preterite, which its use for both 2<sup>nd</sup> and 3<sup>rd</sup> sing. suggested. After that, *-āiš* would be complemented by 3<sup>rd</sup> pl. *-āiša*.

§ 818. Armenian. So far no *s*-preterites have been found. Compare the remarks on the *ç*-aorist, § 672 p. 204.

§ 819. Greek. First, a few examples shall be added to those given in §§ 812 and 813. Hom. *ἐ-κερσ-α* Att. *ἐ-κειρ-α* from *κείρω* 'I shave' fut. *κερῶ*. Hom. *ἐ-κελσ-α* from *κέλλω* 'I move, drive'. *ἐ-στειλ-α* (*ἐστέλσιν* in Hesych.) from *στέλλω* 'I order, arrange'. *ἐ-πηλ-α* for *\*ἐ-παλσ-α* mid. *πάλτο* from *πάλλω* 'I shake, brandish'. On the relation of Lesb. *ἐφθερρα* Att. *ἐφθειρα* Dor. *ἐφθηρα* to Hom. *ἐκερσα*, and of Lesb. *ἐστέλλα* Att. *ἐστειλα* Dor. *ἐστηλα* to Hom. *ἐκελσα*, and such like, see I § 563.3 p. 419, Wackernagel, Kuhn's Zeitschr. xxix 127 ff., the Author, Gr. Gr.<sup>2</sup> p. 63. *ἐμεινα* Lesb. *ἐμεννα* Dor. *ἐμηνα* for *\*ἐ-μενσ-α* from *μένω* 'I remain'. So *ἐκτεινα* from *κτείνω*

'I kill', ἔθνεμα from νέμω 'I divide'. ἔνευσ-α from νέ(φ)-ω 'I swim': Skr. mid. *á-snoṣ-ṭa* (gramm.). ἔπνευσ-α from πνέ(φ)-ω 'I blow, breathe'. ἔπερσ-α from πέρω 'I sack, destroy'. ἔτρεψ-α from τρέπω 'I turn': Lat. *torsī* for *\*torcs-ī* from *torqu-eō*. ἔγραψ-α from γράφ-ω 'I write', *√gerph-*. ἔφρασ-α from φράζω 'I give to understand, show' for *\*φραδ-ω*: Lith. 1<sup>st</sup> and 2<sup>nd</sup> pl. injunct. (fut.) *giřs-me -te* from *girstū* 'I apprehend', *√gherd-*. βράξαι· συλλαβεῖν (Hesych.) beside aor. βραχεῖν: Skr. *á-mrākṣ-ī-t á-mārkṣ-ī-t* from *mṛśá-ti* 'touches, grasps' (§ 527 p. 90). ἔσπεισ-α Cret. ἔσπενσ-α from σπένδιω 'I offer, pour'. ἔπεισ-α from πείθω 'I persuade', *√bheidh-*; ἔπεισα instead of *\*ἔφσεισα* like Skr. *á-dukṣa-t* instead of *á-dhukṣa-t*, which is also found (§ 659 p. 195). ἔγευσ-α from γένω 'I give to taste', *√gēus-*. ἐύσ-α from εὔω 'I burn': Lat. *ussī* from *ūr-ō*, *√eus-*. ἔγλυψ-α from γλύφω 'I incise, engrave'. ἔζεσ-σα ἐξεσα from ζέ(σ)-ω 'I boil, bubble'. θίσσαντο for *\*θετσο-* from θίσσεισθαι 'to beseech', *√ghedh-* (§ 706 p. 234). ἐδέξ-άμην δέκτο for *\*δεκσο-το* from δέχομαι 'I receive'. ἔκλαισ-α from κλαίω 'I weep' for *\*κλαφ-ω*. ἡσάμην ἄσμενος from ἡδύμαι 'I rejoice': Lat. *suās-ī* from *suād-eō*. ἔπηξ-α πήκτο for *\*πηκσο-το* from πηγνύμι 'I fix' *√pak-* *pāg-*. ἔδησ-α from δέδημι 'I bind', *√dē-*.

§ 820. The *α* which is seen after *σ* came from the 1<sup>st</sup> sing. in *-σ-α* and the 3<sup>rd</sup> pl. in *-σ-αν* (whence, by complementary analogy, *-σα-ς -σα-τε -σα-ο* etc.). According to Osthoff, Perf. 407, *α* is regular also in *-σαμεν -σαμεθα -σαμην*, which endings he derives from *\*-s-ḡmen* and so forth. The 3<sup>rd</sup> sing. in *-σε* properly belongs to the thematic conjugation; ἔδειξ-ε is like Skr. *á-dikṣa-t* Lat. *dixi-t* (see § 833). The 2<sup>nd</sup> and 3<sup>rd</sup> sing. *\*ἔδειξ = \*ἔδεικ-σ-ς* and *\*ἔδεικ-σ-τ* were dropt for clearness; and it was the perfect forms (λέλοιπε : λέλοιπα) that caused a thematic form to take root in the 3<sup>rd</sup> singular and nowhere else.

The Conjunctive in Homer and elsewhere still shows the thematic vowel, as τείσομεν, instead of which we have later τείσωμεν (§§ 914, 923). We have already seen (§ 747 p. 269)

that the indic. fut. in *-σω* was in all probability partly the conjunctive of the *s*-aorist; compare further in § 833.

The optative in *-σαιμι* is a re-formation on the analogy of the optative in *-οιμι*; see § 944. On forms like *δείξειαν*, see § 836.

The Participle Active shows in all its cases *-σαντ-*; see II § 126 pp. 399 f., and IV § 1099. 6.

Even before *α* had spread by analogy in the system of the *σ*-aorist, *σ* had dropt between a root-final consonant (explosive, liquid, or spirant) and a personal ending with consonant initial (I § 566 p. 423). Some forms of this kind lasted into the historical period: Hom. *λέκτο* 'laid itself' for \**λέκσ-το*, imper. *λέξο* for \**λέκσ-σο*, partic. *-λέγμενο-ς* for \**λεκ(σ)-μενο-ς*, beside *ἔλεξα ἐλέξατο*; *ἔμεικτο* 'mixed itself' for \**ἐ-μεικσ-το*, *ἐμείχθης* for \**ἐ-μεικ-σ-θης* (§ 589 p. 130), beside *ἔμειξα*; *πάλλω* for \**παλσ-το*, beside *ἔπηλα*; *ἄρμενο-ς* for \**ἄρσ-μενο-ς*, beside *ἤρσα*.

In forms like *ἴσθησα ἔδησα ἔμνησα ἐτίμησα ἐμίσθωσα* (§§ 819, 822), *σ* seems to have been due to the analogy of consonantal stems, as *ἔτερψα ἐκήρυξα* (cp. I § 564 p. 420), just as *στέγω τιμίσγω* got their *σ* by analogy of *τέρωσκω κηρύσσω* (§ 755 p. 274). But *σ* drops, as it should, in *ἦδεα* for \**ἐ-φειδεσ-α* (§ 836).

Remark. El. *ἰποίηα* has not kept unaltered the Idg. sounds. It is far more likely that *α* disappeared in Elean itself; in the same way the change of *σ* to *h* in Lac. *ἐνίσαι* and Argive *ἰπολφ-ηέ* belonged to these dialects separately.

The question might be asked whether the *σ* of *ἔμνησα ἔμνησαν* may not have returned to them unweakened at some time when the forms \**ἔ-μνᾶσ(-ε)* \**ἔ-μνᾶσ(-τ)* \**ἔ-μνᾶσ-τε* \**ἔ-μνᾶσ-τον* existed; just as *ἦσαν* (beside Boeot. *παρ-εῖαν*) got back its *σ* by analogy of *ἦσθε ἦστον ἦσθη*. I put the counter question, why we have *ἦδεα*, not *ἦδεσα*. It cannot be made probable that this *es*-formation was found in the singular only — if so, the state of things would differ widely from the *s*-aorist.

§ 821. The pr. Idg. differences in root-gradation (§ 811 p. 348) were largely levelled out in Greek.

Often the vocalism of the whole aorist was decided by the Present; and we saw in § 748 p. 270, that where this



dependence upon the present stem is seen, the  $\sigma$ -future always goes along with the aorist. Compare ἔγραψα ἔγλυψα ὤμορξα ἔστιξα ἔσχισα ἔπηλα (for \*ἔπαλσα) with γράψω γλύψω ὀμώγω στίξω σχίξω πάλλω, but ἔτερψα ἔδειρα (for \*ἔδερσα) ἔστειξα ἔφθειρα (ἔφθερσα) ἔστειλα (ἔστειλσα) beside τέρω δέρω στείχω φθείρω στέλλω. Thus there is no ground for believing that, say, ἔσχισάμην inherited from the parent language its grade σχισ- (cp. Skr. *áchitsi*), or that the conj. δείρω inherited \*ḍers- (cp. Skr. *dārṣ-a-t*).

The vocalism is independent of the present in ἔτρεσα beside τίνω, or ἔδειξα beside Cret. -δίκνυτι (Att. δαίκνυσι), amongst other examples. The  $\epsilon$  of these forms was carried right through the aorist system. However, it need not come exclusively from the Conjunctive;  $\eta$  may have been shortened to  $\epsilon$  in the indic. ἔδειξα ἔτρεσα, and in ἔξευξα ἔπλευσα ἔκερσα etc., by the rule laid down in vol. I § 611 p. 461. In this case ἔξευξα would be equivalent to Skr. *áyaṇkṣam*. This shortening cannot have taken place in the 1<sup>st</sup> sing. ἔμεινα ἔνιμα for pr. Gr. \*ἔ-μενσ-α \*ἔ-νεμσ-α, as is proved by Lesb. μῆνν-ος Att. μῆν-ός (see *loc. cit.*). But it may have come about in the 2<sup>nd</sup> and 3<sup>rd</sup> sing., at a time when these took the forms \*ἔ-μηνσ(-ς) and \*ἔ-μηνσ(-τ), etc. On this view, the old vowel gradation must have been kept, or undergone nothing but regular change, in the conj. act. and mid. δείξω δείξομαι and in the sing. indic. act. ἔδειξα; while there has been analogical influence in the plural and dual indic. act., and in the whole of the indic. middle, ἐδείξαμεν etc., ἐδειξάμην etc.

Survivals of the original weak grade are ἴσαν, ῥσαν for \*ἡφίσαν<sup>1)</sup> beside εἰσάμην, Hom. ἔστασαν beside ἔστησα, ἄσμενο-ς beside ἡσάμην ἥσασθαι (Lat. *suās*).

1) On ἴσασι Dor. 1<sup>st</sup> sing. ἴσαμι etc., which are due to the analogy of ἴσαν, see § 863.

§ 822. Many  $\sigma$ -aorists come from roots with characteristic, or from present stems of different kinds (usually these have a similar  $\sigma$ -future associated with them).

(1) Forms with Reduplication.  $\acute{\epsilon}\delta\acute{\iota}\delta\alpha\zeta\alpha$  from  $\delta\acute{\iota}\delta\acute{\alpha}\sigma\kappa\omega$  'I teach' for \* $\delta\iota$ - $\delta\alpha\kappa$ - $\sigma\kappa\omega$  Class XXIII (fut.  $\delta\acute{\iota}\delta\acute{\alpha}\zeta\omega$ ).  $\acute{\epsilon}\tau\acute{\iota}\tau\eta\nu\alpha$  from  $\tau\acute{\iota}\tau\alpha\acute{\iota}\nu\omega$  'I stretch' for \* $\tau\iota$ - $\tau\alpha\nu$ - $\mu\omega$  Class XXVII B. Hom.  $\tau\acute{\epsilon}\tau\rho\eta\nu\alpha$  from  $\tau\iota$ - $\tau\rho\alpha\acute{\iota}\nu\omega$  'I bore', cp.  $\acute{\epsilon}\xi\eta\nu\alpha$  under (2). Hom.  $\eta\mu\acute{\iota}\alpha$  Att.  $\eta\acute{\iota}\alpha$  from  $\acute{\alpha}\acute{\iota}\sigma\sigma\omega$  'I rush wildly' for \* $\text{Fai}$ - $\text{Fik}$ - $\mu\omega$ ,  $\acute{\epsilon}\pi\acute{o}\iota\phi\nu\zeta\alpha$  from  $\pi\acute{o}\iota$ - $\phi\acute{\upsilon}\sigma\sigma\omega$  'I blow, snort',  $\acute{\epsilon}\pi\acute{o}\iota\pi\nu\theta\sigma\alpha$  from  $\pi\acute{o}\iota$ - $\pi\nu\acute{\iota}\omega$  'I puff, pant' Class XXVII A (fut.  $\acute{\alpha}\acute{\iota}\xi\omega$   $\acute{\alpha}\xi\omega$  etc.).

(2) With a Nasal Suffix.  $\acute{\epsilon}\kappa\lambda\acute{\iota}\nu\alpha$ ,  $\acute{\epsilon}\phi\eta\nu\alpha$  for \* $\acute{\epsilon}$ - $\kappa\lambda\iota\nu$ - $\sigma\alpha$ , \* $\acute{\epsilon}$ - $\phi\alpha\nu$ - $\sigma\alpha$ , from  $\kappa\lambda\acute{\iota}\nu\omega$  'I bind' for  $\kappa\lambda\iota$ - $\nu$ - $\mu\omega$ ,  $\phi\alpha\acute{\iota}\nu\omega$  'I cause to appear' for \* $\phi\alpha$ - $\nu$ - $\mu\omega$ .  $\acute{\epsilon}\xi\eta\nu\alpha$  for \* $\acute{\epsilon}$ - $\xi\alpha\nu$ - $\sigma\alpha$  from  $\xi\alpha\acute{\iota}\nu\omega$  'I scratch, comb' for \* $\xi$ - $\alpha\nu$ - $\mu\omega$ .  $\acute{\epsilon}\phi\eta\nu\alpha$  from  $\acute{\upsilon}\phi$ - $\alpha\acute{\iota}\nu\omega$  'I weave' (on the  $\acute{\alpha}$  of  $\acute{\epsilon}\phi\acute{\alpha}\nu\alpha$  see the Author, Gr. Gr.<sup>2</sup> 58 p. 71, Solmsen, Kuhn's Zeitschr. xxix 66 f.). For these presents in - $\nu$ - $\mu\omega$  and - $\alpha\nu$ - $\mu\omega$  see under Class XXIX § 743 pp. 265 f. The aorists were formed on the analogy of  $\acute{\epsilon}\kappa\tau\epsilon\iota\nu\alpha$  from  $\kappa\tau\epsilon\acute{\iota}\nu\omega$ ,  $\acute{\epsilon}\pi\eta\lambda\alpha$  from  $\pi\acute{\alpha}\lambda\lambda\omega$ , and so forth (§ 611 p. 150). The futures of these are  $\kappa\lambda\iota\nu\acute{\omega}$   $\phi\alpha\nu\acute{\omega}$   $\acute{\upsilon}\phi\alpha\nu\acute{\omega}$ , § 757 p. 276 f.

Remark.  $\alpha\acute{\upsilon}\eta\nu\alpha$  for \*( $\acute{\epsilon}$ )- $\sigma\alpha\nu$ - $\sigma\alpha$  should be compared with the Lith. 1<sup>st</sup> and 2<sup>nd</sup> pl. injunct. (fut.)  $\text{saus-}\acute{\epsilon}\text{-s-me -te}$ . But these forms are not equivalent. For \* $\text{saus-}\eta\text{-s-}$ , which may be the ground-form of the Lith. aorist stem, would become \* $\acute{\alpha}\acute{\upsilon}$ - $\sigma\alpha$ - in Greek. The Greek aorist was built upon the present, at a time when - $\eta$ - $\acute{\iota}\omega$  had become - $\alpha\nu$ - $\mu\omega$  (- $\alpha\nu\omega$ ).

(3) With Nasal in the root (cp. § 813 p. 351 f.).  $\acute{\epsilon}\pi\lambda\alpha\gamma\zeta\alpha$  from  $\pi\lambda\acute{\alpha}\zeta\omega$  'I strike, beat' for \* $\pi\lambda\alpha\gamma\gamma$ - $\mu\omega$  Class XXIX: Lat.  $\text{plānxi-t}$ .  $\acute{\epsilon}\kappa\lambda\alpha\gamma\zeta\alpha$  (fut.  $\kappa\lambda\acute{\alpha}\gamma\zeta\omega$ ) from  $\kappa\lambda\acute{\alpha}\zeta\omega$  'I make a sound, cry' for \* $\kappa\lambda\alpha\gamma\gamma$ - $\mu\omega$  Class XXIX and beside  $\kappa\lambda\alpha\gamma\gamma$ - $\acute{\alpha}\nu\omega$  Class XIV.  $\acute{\epsilon}\sigma\phi\iota\gamma\zeta\alpha$  (fut.  $\sigma\phi\acute{\iota}\gamma\zeta\omega$ ) from  $\sigma\phi\acute{\iota}\gamma\gamma\omega$  'I bind, tie' Class XVI. See § 621 p. 158, § 628 p. 166, § 631 p. 167, § 744 p. 266.

(4) Later group of Denominatives. Following  $\acute{\epsilon}\kappa\tau\epsilon\iota\nu\alpha$ :  $\kappa\tau\epsilon\acute{\iota}\nu\omega$ ,  $\acute{\epsilon}\pi\eta\lambda\alpha$ :  $\pi\acute{\alpha}\lambda\lambda\omega$ ,  $\acute{\epsilon}\sigma\tau\epsilon\iota\lambda\alpha$ :  $\sigma\acute{\tau}\acute{\epsilon}\lambda\lambda\omega$ ,  $\acute{\epsilon}\pi\lambda\eta\zeta\alpha$ :  $\pi\lambda\acute{\eta}\sigma\sigma\omega$ ,  $\acute{\epsilon}\sigma\phi\alpha\zeta\alpha$ :  $\sigma\phi\acute{\alpha}\zeta\omega$  were formed  $\acute{\omega}\nu\acute{o}\mu\eta\nu\alpha$  from  $\acute{\omicron}\nu\omicron\mu\alpha\acute{\iota}\nu\omega$  'I name',  $\acute{\epsilon}\tau\epsilon\kappa\tau\eta\nu\acute{\alpha}\mu\eta\nu$  from  $\tau\epsilon\kappa\tau\alpha\acute{\iota}\nu\omicron\mu\iota$  'I carpenter' ( $\acute{\epsilon}\sigma\acute{\eta}\mu\acute{\alpha}\nu\alpha$  beside  $\acute{\epsilon}\sigma\acute{\eta}\mu\eta\nu\alpha$  like  $\acute{\upsilon}\eta\mu\acute{\alpha}\nu\alpha$ , see above),  $\acute{\eta}\gamma\gamma\epsilon\iota\lambda\alpha$  from  $\acute{\alpha}\gamma\gamma\acute{\epsilon}\lambda\lambda\omega$  'I announce',  $\acute{\epsilon}\kappa\acute{\eta}\theta\acute{\iota}\zeta\alpha$  from

κηρύσσω 'I proclaim', ἤρπαξα from ἀρπάζω 'I seize', ἐσάλπιγξα from σαλπίζω 'I sound the trumpet' (for \*σαλπιγγ-ιω), ἐτέλεισσα Att. ἐτέλεσα from τελέω -ω 'I finish' (for \*τελεσ-ιω). The futures are ὀνομασιῶ τεκτανοῦμαι ἀγγελῶ like κτενῶ etc., but κηρύξω ἀρπάξω σαλπύγξω τελέεσσω like πλῆξω etc. Compare § 756. 3 p. 275.

Many analogical changes took place in the aorist forms from presents in -ζω, because these represent both -δ-ιω and -γ-ιω; e. g. ἤρπασα instead of ἤρπαξα following ἰδίκασα (δικάζω for -αδ-ιω), and ἰδίκαξα instead of ἰδίκασα following ἤρπαξα. The ending -ξα became very common for δ-verbs in Doric and the N.-W. Greek dialects. The σ-future followed suit.

(5) σ-aorists from stems having the suffixes -α-, -ε- or ο go back to the pre-Greek period. To those cited in § 813 p. 351, add the following: ἔμνησα Dor. ἐμᾶσα from mn-ā-√men- 'think, mean'; ἔβησα Dor. ἐβᾶσα from g-ā- 'to go' (§ 497 Rem. p. 57); ἔζησα ἐζίσσα from gi-ē- gi-ō-√gei- 'live'; ἔχορησα from χρ-η- 'to give an oracle'. Amongst dissyllabic aorist stems with these suffixes, those in -η-σ- take a prominent place; as ἐμέλησε from μέλει 'it is a care', ἐθίλησα from θέλω 'I wish', ἰδέησα Hom. Aeol. ἰδεύησα from δέω Hom. Aeol. δεύω 'I lack, need', with which were associated forms made from present stems with some characteristic, as καθιζήσαζ from ἵζω 'I place' for \*si-zd-ō, ἐτύπησα from τύπ-τω 'I strike', ἐχαίρησα from χαίρω 'I rejoice' for \*χαρ-ιω, ὠζησα from ὀζω 'I smell' for \*ὀδ-ιω. With these go similar futures, as μνήσω βήσομαι μελήσει, see § 750. 1 p. 271, § 756. 1 p. 275.

(6) Along with the forms mentioned under (5) go the aorists of later denominatives, as ἐτίμασα Ion. ἐτίμησα, ἐφίλησα, ἐμίσθωσα, ἐδάκρυσα, ἐκόνισα. See § 756. 5 p. 276, § 773 p. 290, § 813 p. 351.

§ 823. *Italic.* Three Italic categories fall here.

(1) Forms of the perf. indic. ending in *-s-t* (to the building up of which a great many things have gone, see § 367). We have already mentioned *dēmpst prōmpst serpst*

*torsī mulstī vīstī dīxī ussī vēxī cōxī -rēxī -lēxī plēxī sudstī jousī jussī, jūnxī ē-mūnxī plānxī*; §§ 812, 813. Other examples are: *mānsī* from *muneō*. *tempsī* from *temnō*. *mirī* (*mīxī*?) and *mīnxī* from *mingō* ✓ *meiġh-* 'to stale': Gr. ὠμίξα (*i* ?), Lith. 1<sup>st</sup> and 2<sup>nd</sup> pl. injunct. (fut.) *mīsz-me -te*. *scripsī* from *scribō*. *dī-vīstī* from *dī-vidō*. *frīxī* from *frīgō*: cp. Skr. *á-bhrākṣ-am á-bhārṁṣ-am* (gramm.) from *bhṛjjá-ti* (cp. § 524 p. 87). *dūrī* from *dūcō*. *clepsī* from *clepō*: Gr. ἐκλεψα from κλέπτω 'I steal'. *pēxī* from *pec-tō*: Gr. ἐπεξάμην from πεκ-τέω 'I comb'. *cōn-spēxī* from *-spiciō*. *ges-sī* from *gerō* for \**gesō*. *aurī* from *augeō*: Lith. 1<sup>st</sup> and 2<sup>nd</sup> pl. injunct. (fut.) *áuks-me -te* from *augu* 'I increase'. *haesī* for \**haes-sī* from *haereō*. With internal nasal (cp. *jūnxī* etc., above): O.Lat. *nīnxi-t* from *ningui-t* ✓ *sneiġh-* 'snow': cp. Gr. ἐνειψε (*ēvīpse*). *distīnxī* from *distinguō*: cp. Gr. ἐστιξα from στίζω 'I prick, pierce'. *sānxī* from *sanciō* beside *sacer*.

In the paradigm of *dīxī* there is not one form which can be held with any safety to be regularly derived from one of the unthematic forms of the pr. Idg. *s*-aorist. We cannot connect the 1<sup>st</sup> sing. with Skr. mid. *kṛ-ṣ-ē* beside *á-kṛ-ṣ-i* (§ 656 p. 191), because of its past meaning. It is as impossible to prove that *-imus* in *dīx-imus* represents a proethnic \**-ḡimos*, as it is to prove that *-αμεν* in *ἐ-δείξ-αμεν* represents \**-ḡimen* (§ 820 p. 356). The short forms of the 2<sup>nd</sup> pl., e. g. *dīxtis accestis exclūstis*, may, it is true, be regarded one and all as *s*-aorist forms (cp. Stolz, Lat. Gr.<sup>2</sup> p. 372 footnote 3); but on the other hand there is nothing against the traditional view, namely, that they are contractions of *dīxistis accessistis exclūstistis* (cp. Osthoff, Perf. 216 ff.).

I would suggest that before the *s*-aorist had been drawn into any close connexion with perfect forms like *tu-tud-ī* and with aorists like *fīd-i-t*, some thematic forms had intermingled themselves amongst the non-thematic forms of the *s*-aorist, just as happened in other branches of Indo-Germanic (§ 833). I regard as thematic aorist forms, originally with secondary personal ending, *dīxi-t* and *dīxi-mus* (cp. Skr. *á-dikṣa-t*

*á-dikṣā-ma*, Gr. ἱ-δεῖε, O.C.Sl. *jeso-mŭ*), whose ending is equivalent to that of *fidi-t fidi-mus*; then between pret. *vīsi-t vīsi-mus* and present *vīsi-t vīsi-mus* there was the same relation as between pret. *scandi-t* and pres. *scandi-t* (the preterite forms originally had a secondary personal suffix). If aorists of this kind came to have the same syntactical value as perfect forms such as *totondit totondimus*, then *dīx-ī fid-ī* might be made on the model of *totond-ī*. To this group were attracted *vīdistis vīdistī*, which really belong to the is-aorist (possibly *vīderunt* also, see § 1023), and on the model of them sprang up *dīxistis dīxistī dīxerunt* (§ 841).

§ 824. (2) The Conjunctive with -e- -o-, and the Optative with -ī-.

Lat. *dīxō dīxim*: Gr. δεῖξω. *axim*: cp. Gr. ἀῖξετε § 833. *empsim*, *in-cēnsim*, *capsō capsim*, *ob-jexim*, *faxō faxitur faxim*, *oc-cīsim*, *ausim*. Conj. *dīxō* beside indic. pres. *vīdō* indic. pret. *dīxi-t dīxi-mus*, like Skr. conj. *tāsa-t(i)* beside indic. pres. *tāsa-ti* pret. *(á-)tāsa-t*, see § 833.

The Umbr.-Osc. s-future is also a similar conjunctive (on the disappearance of the conj. vowel, see I § 633 p. 474, § 655.5 p. 503 and the remarks on the ending -e-d of the 3<sup>rd</sup> sing. perf. in § 867.7 below). Umbr. fust *fust* Osc. *fust* 'erit' Umbr. 3<sup>rd</sup> pl. *furent*: cp. Gr. ἐφῆσα etc., § 812 p. 350. Umbr. *pru-pehast* 'ante piabit'. Osc. *deivast* 'iurabit', *censazet* 'censebunt'. Compare the future with -es-, Umbr. *ferest* Osc. *pert-ernest* § 837. The ending of the 3<sup>rd</sup> pl. Umbr. -ent(i) stands for \*-onti, see § 1022 at the end.

(3) Conjunctive with -ē- (§ 926 b). Osc. *fusi-d* 'foret', cp. § 812 p. 350. Lat. *essem*, cp. Gr. fut. ἔσομαι. Lat. *ferrem vellem essem con-derem* (✓ *dhē-*) *darem stārem*, see § 812 pp. 348 f. With the root-suffixes -ā-, -ē-: *in-trārem hiārem flārem nārem arārem iuvārem*, -plērem nērem flērem vidērem tacērem; then denominatives as *plantārem claudērem finīrem*. See § 813 p. 351. Pelign. *upsaseter* 'operaretur' or 'operarentur'.

Compare the forms with *-es-* Lat. *agerem viverem*, Osc. patensins for \**patenesent* § 837.

This *ē*-conjunctive from the *s-* and *es*-aorist was very closely connected in Latin with the Infinitive in *-se* for \**-s-i* (loc. sing.); e. g. *esse ferre in-trāre -plēre plantāre claudēre finīre*. The same sort of thing occurs in Aryan and Greek; as Skr. inf. *ji-ṣ-ē* beside indic. *á-jaiṣ-am* (mid. \**á-jiṣ-i*), inf. *ṛñj-ás-ē* beside indic. *ṛñj-as-ē* part. *ṛñjas-áná-s*, Avest. inf. *a nāš-ē* ('to make away with') beside *nāš-i-ma* (§ 815), Gr. *δεῖξαι μνῆσαι τιμῆσαι κοῖνσαι* beside *δεῖξα* etc. The infinitives belong to nominal *s*-stems (II § 132 pp. 414, 416, 418, § 162 pp. 489 f.), and are a proof of the etymological sameness of the *s*-suffix in the verb and in the noun; see § 655 p. 189, § 834.

§ 825. As regards the relation of the vocalism in the root-syllable of the Italic *s*-forms to that of the parent language (§ 811 p. 348), all is obscure.

The vocalism has been influenced by non-aorist forms in many words; e. g. *mulsi* beside *mulgeō mulctum*, *torsi* beside *torqueō tortum*, compared with *tersi* beside *tergeō (tergō) tersum*. Sometimes the aorist goes along with the *to*-participle, and is different from the present; *ussi* : *ustu-s*, but *ūrō*; *dī-vīsi* : *dī-vīsu-s*, but *-vidō*; howbeit, *mīsi* is different from *missu-s*.

Whether *ē* in *-lēxi tēxi vēxi rēxi* in the Idg. *ē* of O.C.Sl. *těchŭ* Skr. *ádhakṣam*, is doubtful in the extreme. It appears to have been imported from forms like *lēg-i* beside partic. *lēc-tu-s*, and suchlike. *coxi* (for \**quexi*) like Gr. *ἔπειρα*, cp. partic. *coctu-s* (for \**quectu-s*).

As regards forms like *serpsi dīxi* (for *deix-*) it must be remembered that *ē* may have been shortened to *e* as set forth in vol. I § 612 p. 462, *serps-* for \**sērps-* and so on.

§ 826. Keltic. In Irish the only indic. forms we have are the 2<sup>nd</sup> and 3<sup>rd</sup> sing., but without augment, and therefore really injunctive. The 2<sup>nd</sup> sing. is only used as a conjunctive (or hortative), the 3<sup>rd</sup> sing. both as conj. and future. Examples: 2<sup>nd</sup> sing. *comēir* 'raise thyself' for \**cóm-ecs-recs-s* beside

*con-ērgim* 'I raise myself': Gr. *ōpsēa*. 2<sup>nd</sup> sing. *tair* 'veni' for \**tō-air-incs-s*, 3<sup>rd</sup> sing. *tair* 'veniat' for \**incs-t*, *co-tē* 'donec veniat' for \**t(o)-incs-t* beside *-icim*: cp. Skr. pret. mid. *ākṣ-i* beside pres. *ākṣa-tē* from *aś-nō-ti* 'reaches' (§ 659 p. 194). *for-tē* 'subveniat, iuvet' for \**-steics-t* beside *tiagim* 'I step, go' (*for-tiagim* 'I come to the help'), √ *steigh-*: Gr. *ē-stēiḡ-a*; perhaps by contamination of *-tē* with the conjunctive *tēis* (see below) arose *-tēi*, which is used as equivalent to *-tē*. *do-n-fē* 'let him lead us' for \**-pēt-s-t*<sup>1)</sup> beside *fedim* 'I bring, lead': Lith. *vėsme* etc., see § 812 p. 350.

In all persons the Conjunctive is used with conj. meaning, and more rarely as a future. Examples: — from *tiagim*: sing. 1<sup>st</sup> pres. *-tias* 2<sup>nd</sup> *-tēis* 3<sup>rd</sup> (abs.) *tēis tēs*, pl. 1<sup>st</sup> *-tiasam* 2<sup>nd</sup> *-tēsid* 3<sup>rd</sup> *-tiasat*. On account of the relation between absolute and conjunct inflexion in the present, arose the new forms sing. 1<sup>st</sup> *tiasu* 2<sup>nd</sup> *tēisi*, pl. 1<sup>st</sup> *tēisme* 2<sup>nd</sup> *tēsit*. Other instances: *no tes* 'effugiam' from *techim* 'I flee': O.C.Sl. *téch-ŭ* from *tekā* 'I run, flee': *at-resat* 'surgent' from *at-reig* 'raises itself', cp. *comēir* above; *co n-dārbais* 'ut demonstres' from *du-ad-bat* 'demonstrat' (pass. *-badar*); *ma fris-tōssam* 'si abiuraverimus' from *tongaim* 'iuro'.

Again, the so-called *t*-preterite comes in here, as far as it was derived from the 3<sup>rd</sup> sing. mid. of the *s*-aorist in \**-s-to*; say *do-bert* 'he brought' for \**-ber-s-to*, *celt* 'celavit' for \**cel-s-to*, *ro-anacht* 'he protected' for \**anek-s-to*. See § 506 p. 72 f.

§ 827. Germanic. A survival of the *s*-aorist is conjectured in O.H.G. *scri-r-un* 'they cried' opt. *scri-r-i* (part. pret. *gi-scriran*) beside pret. sing. *srei* 'he cried' pres. inf. *scrian* 'to cry'; *-r-* = pr. Germ. *-z-*, see I § 581 p. 434. Later on, this *r*-formation got into the verb *spīwan* 'to spew', the participle being changed from *ge-spiwen* to *ge-spiren* (but, vice versa, O.H.G. 3<sup>rd</sup> pl. *er-scriwun* follows *spīwun*). See

1) The long vowel in *-fē* is not due to Compensatory Lengthening, but to the fact that monosyllables bearing the chief accent, and ending in a vowel, were all lengthened in Irish (III § 440. 2 p. 373).

Joh. Schmidt, Kuhn's Zeitschr. xxv 599 f.; Kluge, Paul's Grundr. i 375. But this view of *scrirum* is very questionable; see G. Holz, Urgerm. geschloss. *z*, pp. 47 f.; and Zarneke in P.-B. Beitr. XV 350 ff.

A few *s*-aorist forms have perhaps contributed to the system of the weak preterite, as Goth. *vissa* O.H.G. *wissa* 'he knew', whose plurals *wissum wissut wissun* may be compared with Gr. *ῥαυ*. Compare § 907.

#### § 828. Balto-Slavonic.

In Lithuanian, we find the 1<sup>st</sup> and 2<sup>nd</sup> plural and the 1<sup>st</sup> and 2<sup>nd</sup> dual injunctive used with future meaning. They have run into one paradigm with the future in *-siu* (§ 761 p. 278), and in certain dialects appear side by side with the future in *-sime -site* and *-siva -sita*. As the Lith. future could be used hortatively in the 1<sup>st</sup> and 2<sup>nd</sup> persons, there is the less reason for surprise at this commixture of the injunctive with the future in *-sjo-*. In addition, the 3<sup>rd</sup> sing. in *-s* appears to belong to our *s*-aorist, at least partly. If, for example, we assume that *-s* comes from *-st*, it is easy to understand the vowel shortening in *būs* (1<sup>st</sup> sing. *būsiu*) *ris* (1<sup>st</sup> sing. *rýsiu*) *gaūs* (1<sup>st</sup> sing. *gáusiu*) and the like, of which more is said in I § 664. 3 p. 523. Then we may compare the use of the future in general statements as *kàs vòks nepralòps* 'the thief never grows rich' with the similar use of the injunctive in Greek (§ 909. 1). And further, this view of the 3<sup>rd</sup> singular is favoured by the Prussian forms, used exclusively as conjunctive, *boūsai* (*boūsei boūse*) 'be he, be they', and the like, which cannot be separated from Lith. *su-gausai* beside *su-gaūs* etc., whose *-ai* moreover is the same affix as we see in *tasaī* beside *tàs* 'the, that' (§ 999). This would be making *\*būs* for *\*bū-s-t* proethnic Baltic.

O.C.Sl. *s*-aorist forms of this group are the 2<sup>nd</sup> and 3<sup>rd</sup> sing., plur., and dual; as sing. *ję ję*, pl. *jęste jęse*, dual *jęsta jęte*; but the 1<sup>st</sup> persons are thematic (*jęsū jęsomū jęsově*); see § 833.

Of *s*-forms preserved in both branches we have mentioned in § 812 *gīs-me -te* from *genù* 'I hunt, drive' O.C.Sl. *po-žę* from



*žin-ją* 'I cut, harvest', Lith. *imš-me* from *imù* 'I take' O.C.Sl. *jēs-ũ* from *imā* 'I take', Lith. *plāus-me* from *plāu-ju* 'I rinse' O.C.Sl. *pluch-ũ* from *plov-a* 'I swim, sail', Lith. *pa-būsme* from *pa-bundũ* 'I awake' O.C.Sl. *bljusũ* from *bljudą* 'I guard, protect, take care', Lith. *vės-me* from *vežũ* 'I drive' (trans.) O.C.Sl. *vēs-ũ* from *veza* 'I drive' (trans.), Lith. *vės-me* from *vedũ* 'I lead' O.C.Sl. *vēs-ũ* from *ved-a* 'I lead', Lith. *dėks-me* from *deg-ũ* 'I burn' (trans. and intr.) O.C.Sl. *žachũ* from *žeg-a* 'I burn' (trans.), Lith. *ės-me* from *ėd-mi* *ėd-u* 'I eat' O.C.Sl. *jas-ũ* from *jamĩ* 'esse', Lith. *dės-me* from *de-d-ũ* 'I lay' O.C.Sl. *děch-ũ* from *dě-ją* 'I lay', Lith. *spės-me* from *spė-ju* 'I have leisure' O.C.Sl. *spěch-ũ* from *spě-ją* 'I get on, have success', Lith. *dũ's-me* from *dũ' du* 'I give' O.C.Sl. *dach-ũ* from *damĩ* 'I give', Lith. *stós-me* from *stó-ju* 'I tread' O.C.Sl. *stach-ũ* from *sta-na* 'I place myself', Lith. *būs-me* from *bũ-ti* 'to be' O.C.Sl. *bych-ũ* from *by-ti* 'to be', Lith. *gýs-me* from *gy-jũ* 'I revive, get well' O.C.Sl. *žich-ũ* from *ži-vą* 'I live'. Forms with *-a-*, *-ē-*, and denominative forms in § 813: Lith. *pa-vydėsme* from *pa-výd-žiu* 'invideo' O.C.Sl. *viděchũ* from *vižda* 'I see', Lith. *lankós-me* from *lankó-ju* 'I try to make soft or malleable' O.C.Sl. *lākach-ũ* from *lāka-ją* 'I cheat, deceive'.

§ 829. Lithuanian. Besides the examples given in § 828 others were given in §§ 812 and 813, as *mĩlsz-me* from *mėlė-u* 'I milk', *sės-me* from *sėd-u* 'I place myself, sit', *žiós-me* from *žio-ju* 'I open my mouth', *gūdės-mė-s* from *gūdė-jũ-s* 'I am greedy', *jūkũ's-me* from *jūkũ'-ju* 'I play, sport'.

The vocalisation of the root in the forms under § 812 is always that of the *sjo*-future. There is no trace left of the Idg. vowel gradation (§ 811 p. 348).

From present stems with internal Nasal: *jũnks-me* from *jũng-iu* 'I put in the yoke', *skũs-me* from *skũnd-žiu* 'I lament' (cp. § 761 p. 278), to be compared with Skr. *á-yunākṣ-mahi* Lat. *jũnx-i*. From presents in *-inu -enu*: *saũsš-me* from *saũs-inu* 'I make dry', *gabėš-me* from *gabe-nũ* 'I push something

forward, help it on' (cp. § 761 p. 278), to be compared with Gr. *αἵμα* for *\*(ē-)σασ-αν-σα* (§ 822. 2 p. 359), and again with O.C.Sl. *vrīgnach-ŭ*, granting the correctness of the hypothesis offered in § 615 Rem. p. 154.

§ 830. Slavonic. Some examples were given in § 828, and more in §§ 812 and 813; as *po-sluchŭ* from *-slu-jā* 'I hear', *orach-ŭ* from *or-jā* 'I plough', *rŭdēch-ŭ* from *rŭdā* 'rubeo', *cělēch-ŭ* from *cělē-jā* 'I get well'. On the aorist in *-nqch-ŭ*, as *vrīchnachŭ* from *vrīg-nq* 'I throw', see § 615 p. 154 and § 829.

The general question of the s-aorist inflexion has been discussed in § 829 p. 366. In the 2<sup>nd</sup> and 3<sup>rd</sup> sing. -s-s and -s-t dropt entirely by rule, which gave forms like *jē* the look of a preterite of our I<sup>st</sup> Present Class, those like *zna ora rŭdē* the look of preterites of Present Class X, and denominatives like *lāka* the look of preterites without -jō- such as Gr. Lesb. *ἐρίμα* (for *\*-a-t*). Probably, however, some of these forms really are what they look like; for instance *bē* 'eras, erat' may come from Idg. *\*bhū-ē-s -t* as well, and *da* 'thou gavest, he gave' may also come from Idg. *\*dō-s -t*.

With roots in a consonant, the 2<sup>nd</sup> and 3<sup>rd</sup> sing. are found only when this root-final was a nasal, *r*, or *l*; as *jē* (*jēsŭ*), *žrē* and *žrī* (*žrēchŭ* for *\*žerchŭ* and *žrīchŭ* from *žīr-a* 'I devour, offer'), *kla* (*klachŭ* for *\*kolchŭ* from *kol-jā* 'I slay'); otherwise the thematic aorist without *s* was used, as 2<sup>nd</sup> and 3<sup>rd</sup> sing. *teče* beside *tēchŭ tēchomŭ* etc. The reason is that these roots were the only ones which according to the laws of Slavonic did not drop their final consonant.

The 2<sup>nd</sup> and 3<sup>rd</sup> sing. often add -tŭ, the ending of the 3<sup>rd</sup> sing. pres.; as *pri-jētŭ* instead of -jē, *bitŭ* instead of *bi* (*bija* 'I strike'), *u-mrētŭ* instead of -mrē (*u-mīrā* 'I die'); *dastŭ* instead of *da* following *dastŭ* 'dat'. This addition came up first in the 3<sup>rd</sup> sing. aorist, and then went on to the 2<sup>nd</sup> sing. because the two persons had the same form. Compare imper. *juždŭ* both 2<sup>nd</sup> and 3<sup>rd</sup> sing. § 949, and again Skr. 2<sup>nd</sup> and 3<sup>rd</sup> dual *cakr-āthur -ātur* § 1038.

§ 831. From what was said in § 811 p. 348 on the Idg. gradation of the root syllable, it follows that *ē* is original in such forms as *věšū nēsū tēchū rēchū* (*reka* 'I say'), and the *a* = Idg. *ō* in *basū* (*boda* 'I pierce', cp. Lat. *fodiō fodi*); the long vowel was originally confined to the singular. Since a long vowel before *i*, *u*, liquid, or Nasal + Consonant was shortened, as laid down in vol. I § 615 p. 465, the same vowel-grade may be assumed for forms like *bich-ū* (\**bhēi-s-*), *cisū* (*cīta* 'I count, reckon, honour', cp. Skr. *cāits-*), *po-sluchū* (Skr. *śrauṣ-*), *mrēch-ū* for \**merch-ū* (*mīra* 'I die', \**mēr-s-*), *vrēs-ū* for \**vers-ū* (*vrīz-a* 'I tie', cp. Lith. 1<sup>st</sup> and 2<sup>nd</sup> pl. injunct. *veršz-me -te* from *verž-iū* 'I tie', √*uergh-*), *mēs-ū* (*mēta* 'I stir up').

Where the root syllable has a weak grade, this is always seen in the infinitive stem as well, so that we are not justified in assuming that it comes from the Idg. weak form of the plural and dual active. E. g. *žrīch-ū* (also *žrēch-ū*) beside *žrī-ti* (also *žrē-ti*), *klach-ū* for \**kolch-ū* beside *kla-ti* for \**kol-ti* from *qī-* like Lith. *káls-me -te* (§ 726 p. 256), *krych-ū* beside *kry-ti* 'to cover' as contrasted with Lith. *kráus-me kráu-ti*.

§ 832. Roots ending in a consonant also make aorists with the ending *-ochū* in O.C.Sl.; e. g. beside *nēsū*: sing. *nesochū*, pl. *nesochomū nesoste nesoše*, dual *nesochově nesosta nesoste*. The W.-Slav. languages have *-ech* etc. instead of S.-E.-Slav. *-ochū* etc. The conjecture as to this inflexion offered in vol. I § 110 p. 105, and supported now by Jagić, is untenable (Arch. slav. Phil., x 175, 191). It is far more likely that this is some peculiar Slavonic growth; probably a transformation of the aorist without *s* (*nesū*) on the analogy of the s-aorist. The relation of the 2<sup>nd</sup> and 3<sup>rd</sup> sing. *děla* to the 2<sup>nd</sup> pl. *dělaste* 2<sup>nd</sup> dual *-asta* 3<sup>rd</sup> dual *-aste* first caused the 2<sup>nd</sup> and 3<sup>rd</sup> sing. *nese* to change its forms *nesete -eta -ete* into *neseste -esta -este*, as the former were the same as those of the present. Next, *nesochomū nesochově* may have arisen beside *nesomū nesově*, and by and by the 1<sup>st</sup> sing. *nesochū* completed the group. Then

differences were levelled out, the West-Slavonic in all consistency putting *e-* in all persons (*nesech* etc.), while the other branch took *-o-*, and changed *neseste* to *nesoste* etc. A different view is taken by Wiedemann, Beitr. zur altbulg. Conj., 109 f.

## II. Thematic *s*-stems.

§ 833. The forms which fall under this heading belong to our XX<sup>th</sup> Present Class. They have been partly given in §§ 657 ff., and the only reason for reverting to them here is that they are very intimately connected with the non-thematic *s*-aorist.

(1) Indicative. In Sanskrit, as we saw in § 659 p. 194, the use of the thematic vowel with the *s*-aorist was conditioned by the form of the Root, as *á-mṛkṣa-t*; but non-thematic inflexion is also found, as *á-dikṣ-i* beside *á-dikṣa-t* from *diṣ-* 'to show, point', *á-drākṣ-am* beside *á-dṛkṣa-t* from *dṛṣ-* 'to see', *á-srākṣ-am á-sṛkṣ-i* from *syj-* 'to free'. O.Pers. *niy-apišam* 'I wrote' seems to be similar to *á-dikṣ-a-m*, see *loc. cit.* above. An Avestic thematic form is *a-saša-p* from *sarəh-* (*kens-*) 'speak', with strong root.

In Greek, the 3<sup>rd</sup> sing. act. was thematic from the pro-ethnic stage; e. g. *ἔ-δειξε*, see § 820 p. 356. In the Epic dialect this is true of other persons, as *ἔξε-ς ἔξο-ν* beside *ἔξο-μαι* 'I will come', *ἔ-βησι-το* beside *ἔ-βησ-α* fut. *βήσο-μαι* from *g-a-* 'go' (see Curtius, Verb II<sup>2</sup> pp. 307 f.). Perhaps these latter forms arose partly by analogy of the 3<sup>rd</sup> sing. in *-ε*, and partly by that of thematic forms of the imperative (see below).

Remark. The Att. *ἔπεον* 'I fell' *ἔχεον* 'oacavi' do not come in here. They got their *σ* from the fut. *πέσομαι χεοῦμαι*. See F. Hartmann, De aor. sec., 66; Wackernagel, Kuhn's Zeitschr. xxx 313 ff.; the Author, Gr. Gr.<sup>2</sup> p. 169.

Latin. Aorists of this sort are forms like *dixi-t dixi-mus*, see § 823 p. 361. These forms were related to the conj. (fut.) *dixō* and to the opt. *dixim* just as Skr. *á-bhakṣa-t* to conj. *bhákṣa-t*, and Gr. *ἔ-βησε* to conj. *βήσο-μεν*.

Irish. Mid.Ir. *seiss* 'has seated himself, sat' and 'sits' for \**setse-t* from  $\sqrt{\text{sed-}}$ , cp. Skr. conj. *sáts-a-t* Gr. indic.  $\epsilon\sigma\sigma\text{-}\alpha$ . From *seiss* as used for the present upsprang a redupl. pret. *siassair* 'he sat' for \**se-(s)ess-* (Thurneysen, Kuhn's Zeitschr. xxxi 99), to be compared with Skr. *na-nákṣ-úr* from *nák-ṣa-ti* 'reaches' and others (§ 659 p. 194).

In O.C.Slav. the 1<sup>st</sup> persons are thematic, as *jěsŭ jěso-mŭ jěso-vě*. On the *ch* of *dachŭ trŭchŭ* etc., see I § 588.1 and 2, pp. 442 f.; on the Idg. sound-groups *ks* and *qs* in *něsŭ (nesq)* and *rěchŭ (reka)*, see *ibid.*, and § 414 p. 303. The *s*-type spread into the *ch*-series, and thus we have forms like *jachŭ jachomŭ* instead of *jasŭ jasomŭ* (ground-form \**ětso-*,  $\sqrt{\text{ed-}}$  'to eat'), as also in the 3<sup>rd</sup> pl. *jašę* instead of *jaseę*.

(2) Imperative. Aryan and Greek forms come in here. Ved. 2<sup>nd</sup> sing. *něša*, cp. conj. *něš-a-t(i)* from *nī-* 'to lead'; *parša*, cp. conj. *pārṣ-a-t(i)* from *par-* 'to bring over, transfer'; mid. 3<sup>rd</sup> sing. *rāsa-tām* 3<sup>rd</sup> pl. *rāsa-ntām*, cp. conj. *rās-a-t(i)* from *rā-* 'to give'. Avest. 3<sup>rd</sup> pl. *janhe-ntu*, cp. conj. Gath. *jēnagha-itī* from *jam-* (*gem-*) 'to go'. Gr. Ep.  $\omicron\lambda\sigma\epsilon\ \omicron\iota\sigma\acute{\epsilon}\tau\omega$ , cp. fut.  $\omicron\lambda\sigma\omega$  'I will carry, or bring';  $\omicron\psi\epsilon\sigma\theta\epsilon$  (sing.  $\omicron\psi\epsilon\sigma$  in Hesych.), cp. fut.  $\omicron\psi\omicron\mu\alpha\iota$  'I shall see';  $\acute{\alpha}\xi\epsilon\tau\epsilon\ \acute{\alpha}\xi\epsilon\sigma\theta\epsilon$ , cp. fut.  $\acute{\alpha}\xi\omega$  'I will lead';  $\acute{\epsilon}\pi\iota\text{-}\beta\acute{\eta}\sigma\tau\omicron$ ,  $\lambda\acute{\epsilon}\xi\epsilon\sigma$  and others. These Greek imperative forms were adduced in § 747 p. 269 to support the theory that the  $\sigma$ -future, at least in part, has grown out of the conjunctive of the *s*-aorist. I admit that the parallel  $\omicron$ -conjunctives of Aryan and Greek, with which the imperative forms went very closely, belong to the non-thematic indicative with *s*. But I must remind my readers of the formal identity of the Skr. conj. *tāṣ-a-t(i)* and the indic. *ta-sa-ti* Goth. *-pīnsa*. Imperative forms with a genuine personal ending are really Injunctive, and these have been used in the parent language and ever since both for the Indicative and for the Conjunctive (wish, futurity); see § 909. Compare § 854, on the imper. perf. Skr. *mumōc-a-ta* Gr.  $\kappa\epsilon\kappa\omicron\acute{\alpha}\gamma\text{-}\epsilon\text{-}\tau\epsilon$ .

(3) Participle. Skr. *dhīṣa-māṇa-s* Avest. *diše-mna-* beside Avest. 2<sup>nd</sup> sing. indic. *daiš* from *dhī-* 'to notice'. Avest.

*xšnaoše-mna-* beside 3<sup>rd</sup> pl. injunct. *xšnaošen* from *xšnu-* 'to join oneself to, comply with'.

#### B. STEMS IN *-es-*, *-əs-*, AND *-is-*.

§ 834. Between *-s-* and what is usually called the Root there often appears *-e-*, *-o-*, or *-i-*. We have *-e-s-* in Aryan, Greek,<sup>1)</sup> Italic, perhaps Keltic; *-ə-s-* in Aryan, Greek, perhaps Keltic; *-i-s-* in Latin (*-i-s-* in Sanskrit). In view of the connexion of verbal forms with *-s-* and noun-stems with *-s-* (§ 655 pp. 189 f., § 824 p. 363), we may identify Gr. \**Feidec-* in *εἶδε-α* ἦδε-α with \**Feidec-* in gen. *εἶδε-ος*, 2<sup>nd</sup> sing. mid. *ἔ-πελάσ-θης* with adv. *πέλας*, Skr. mid. *á-rōciṣ-ṭa* with neut. *rōciṣ-*, 3<sup>rd</sup> pl. *á-jāriṣ-ur* with Gr. *γῆρας*, and Lat. *vidis-tis* may be compared with *cinis* Gr. *θέμισ-* (II § 134 pp. 425 f.). The same intermediate vowels occur in the *s*-future: Gr. *τενέω* *τενῶ*, *πελάω* *πελῶ*, Skr. *rōciṣya-tē*, see § 749 ff. pp. 271 ff.

Special vowel-grades for the root-syllable, as in the *s*-aorist (§ 811), cannot be made out for the parent language; and regard being had to the variants *-e-s-*, *-ə-s-*, *-i-s-*, which undoubtedly must often have been interchanged by form-transference, we might expect without further argument an intricate ablaut in the root syllable. The commonest grade in historical times is the *e*-grade (1<sup>st</sup> Strong Grade), as *ueṓd-* in Skr. *vēdiṣ-* Gr. *εἶδε(ο)-* Lat. *vīdis-*, *gem-* in Skr. *gamiṣ-* Umbr.-Osc. *benes-*; cp. the *s*-future Skr. *haniṣya-ti* Gr. *θενέω* etc.

As regards the tense, or kind of action denoted, we must observe that whilst the *s*-stems described under (A) are prevalingly aorist, so that we must regard this as fairly representing the proethnic use, these *-es-* *-əs-* and *-is-* stems do not have the aoristic use anything like so often in proportion; for instance, Skr. *arcas-ē* Gr. *ἦδε-α* never had it. The verb-

1) I no longer regard *e* in Gr. *ἦδε-α* as representing Idg. *a*. See p. 271 footnote 1.

suffix *-s-* therefore, in all its forms, had originally nothing at all to do with tense. This explains the mass of instances in all sorts of languages where *s* runs right through the verb (cp. the *s*-verbs, in §§ 656 ff.). Hence it happens that even where *s* does not go through a verb, *s*-forms often enough have no aorist meaning, as in Gr. *εἰδ-εσ-* (*ἦδεα εἰδέω εἰδέειν*). It certainly cannot be proven that here the meaning conveyed was originally aorist. Here again we see how useful it would be if we could keep Verb Morphology quite free from terms borrowed from Syntax (cp. § 484 pp. 33 ff.).

### I. *es*-stems.

§ 835. There are no *es*-preterites in Aryan. But we may refer once more to the presents cited in § 656 pp. 190 f., Skr. *v-ās-te* (Gr. *ἐνι-εσται*) *arc-as-ē* Avest. *rānəh-anəh-ōi* etc.

§ 836. Greek. *ἦδεα εἶδεα* 'I knew', served for a preterite to *οἶδα* 'I know', cp. O.Ir. *ro-fetar* 'I know' with *-es-* or *-is-* (§ 838), Skr. *á-vēdiṣ-am* with *-əs-*, Lat. *vīdis-tis* with *-is-*; conj. Ion.-Att. *εἰδέω εἰδῶ* (2<sup>nd</sup> sing. *εἰδέης εἰδῆς* 3<sup>rd</sup> pl. *εἰδέωσι εἰδῶσι* by transfer to the *ē*: *ō-* conj.)<sup>1)</sup> and (Hom.) *ιδέω*, cp. Skr. *vēdiṣ-a-t* Lat. *vīder-ō*, opt. *εἰδεῖμεν* for *\*fειδ-εσ-ῖ-μεν* sing. *εἰδέειν*, cp. Lat. *vīder-ī-mus vīder-i-m*.

Hom. *ἦτα* (unless it be properly *ῆεα* — see below —, the form in our texts is *ῆτα*) Att. *ῆειν* 'I went', imperf. and aor. preterite to *εἶμι*, ground-form *\*ēḡ-es-ḡ*, cp. Umbr. conj. (fut.) *cest est* 'ibit' for *\*ēḡ-es-e-t(i)*, Skr. mid. *dy-iṣ-ṭa* (gramm.), Lat. *iis-* (i. e. *\*ēḡ-is-*) in *iis-tis ier-ō ier-i-m*. As in pr. Greek *ῆ* dropped between sonants, *ῆειν* (which should be *\*ῆειν*) must have got its iota subscript from *ῆμεν* etc. (§ 502 p. 64); and it becomes a question whether the Homeric form should not be read *ῆεα*. If Hom. *εῖην* is to be recognised for an

1) On the forms *εἰδῶ εἰδέης* in the text of Homer, see W. Schulze, Kuhn's Zeitschr. XIX 251.

optative of εἶμι (see Curtius, Verb II<sup>2</sup> p. 99), it is natural to derive it from \*ἐ(λ)-ε(σ)-ε(ν).

**Remark.** G. Mekler's theory (Beitr. zur Bild. des Gr. Verb., 69 ff.), that ἦδεα comes from \*ἦφεδεκα, an aorist of the verb εἶδω, is untenable. See Wackernagel, Phil. Anzeiger 1887 pp. 240 f.

ἐ-κορέσ-θης (stem κορεσ- 'to satisfy') ἐ-στορέσ-θης (stem στορεσ- 'sternere') come in here as the 2<sup>nd</sup> sing. mid., if we may venture to assume that they helped to form the θην-aorist (§ 589 pp. 129 f.). On ἐκόρεσ(σ)α ἐστόρεσ(σ)α, see § 842.

Furthermore, the future in -έω, as κορέω *τενέω*, if it be a conj. of the es-aorist and not for -εσ-ίω (§ 747 p. 269). The difference in the use of this future and εἰδέω is explained because εἰδέω was bound fast to the indic. εἶδεα.

-es- in Greek has been borrowed by perfect stems, as πεποιθ-ια πεποιθειν beside πέποιθα 'I believe', ἐστήκειν beside ἔστηκα 'I stand', ἐτετίμηκειν beside τετίμηκα 'I have honoured' (side by side with the old perf. preterites like ἐπέπιθμεν ἔσταμεν γεγάτην); the same with -is- in Latin, as *totondis-tis totonder-ō totonder-i-m*. I incline to think that this transfer is independent in Greek and Latin, πεποιθεα following εἶδεα and *totondistis* following *vidistis*; but some hold that it took place before the original language broke up. The matter is discussed by Mahlow, Kuhn's Zeitschr. xxvi 583; the Author, Ber. d. kgl. sächs. Ges. d. Wiss., 1883, pp. 178 f.; Thurneysen, Bezz. Beitr. viii 274; and others. How obvious this re-formation was can be seen from Irish, where in later times the perfect was very largely transformed on the analogy of the s-preterite, as *tānacus* 'I came' instead of *tānac*.

In the Indicative, -εα -εας -εε(ν) became in Ion.-Att. -η -ης -ει(ν). Then -ει(ν) by complementary analogy produces Att. -ειν -εις, cp. ἦν 'eram' instead of ἦα ἦ § 502 p. 65. The 3<sup>rd</sup> pl. was -εσαν in older Attic; this followed \*-εσ-τε \*-εσ-τον \*-εσ-την as ἦσαν followed ἦστε etc. (§ 1021). -εσαν similarly caused the forming of -εμεν -ετε, which are the endings of old Attic. The endings -εμεν -ειτε -εισαν are first found at a late period; so it can scarcely be allowable to derive -εμεν from \*-εσμεν, which



has to be postulated for proethnic Greek. Probably *-ei-* came in from the singular.

A Greek new formation is doubtless the opt. *δεῖξται*, for \**-σ-εσ-ται*, which, on the analogy of the indicative, produced *δεῖξται* *-ειε*; similarly Skr. *á-yā-s-iṣ-am* (§ 839) and Lat. *dix-is-tis dix-er-ō dix-er-i-m* (§ 841). Compare §§ 944 and 1021. 1.

§ 837. Italic has nothing but Conjunctive forms.

(1) *o*-Conjunctive used as future in Umbr.-Osc. (cp. *fust* § 824 p. 362). Umbr. *eest est* 'ibit' for \**eḷ-es-e(ti)*: Gr. *ἔειν* § 836; *ferest* 'feret', an-penes 'impendes'. Osc. *pert-ermet* 'perimet'. The same future could be made from present stems with some characteristic, as Osc. *didedest* 'dabit' beside Vestin. *dī-d-e-t* 'dat' (§ 553 p. 107), to be compared with Skr. mid. *á-dad-iṣ-ṭa* beside *dá-dā-ti dá-d-a-ti*; Umbr. *heries* 'voles' *heriest* 'volet' beside *heris* 'vis' Osc. *heriad* 'velit' (§ 706 p. 233, § 716 p. 249).

(2) *e*-Conjunctive in Latin and Umbr.-Oscan (cp. Lat. *es-s-e-m* Osc. *fu-s-i-d*, § 824 p. 362).

Lat. *ager-e-m ager-ē-s*: cp. Skr. 3<sup>rd</sup> pl. *ājiṣ-ur. unguer-e-m*: cp. Skr. *āñjiṣ-am. merger-e-m*: cp. Skr. *á-majjiṣ-am. vīver-e-m*: cp. Skr. *á-jīviṣ-am*. I think it more likely that *forem* comes from \**fu-es-ē* (I § 172. 3 p. 152), than from \**fu-s-ē*; it therefore belongs to *-bō* for \**fuō*, as *agerem* to *agō*. The same formation is made from characterised present stems; as *sisterem* from *si-st-ō*, *jungerem* from *jung-ō* ✓ *jeug-* (cp. Skr. *ṛñj-as-ē* § 656 p. 191, *ātndh-iṣ-ṭa* § 839), *sternerem* from *ster-nō*, *gnōscerem* from *gnō-scō*.

Umbr. *ostensendi* 'ostenderentur' for \**-tendes-ē-ntēr* (§ 1082. 1). Osc. *herríns* 'caperent' for \**heres-ē-nt* from a pres. \**herō*, *patensins* 'aperirent' for \**patenes-ē-nt* from a pres. \**patenō* (§ 622 p. 159).

§ 838. Keltic. O.Ir. *ro-fetar* 'I know' 3<sup>rd</sup> sing. *ro-filir* for \**uid-es-* (I § 521 p. 379, and Thurneysen Kuhn's Zeitschr. xxxi 62 f., 98): Gr. *ἵδεα* conj. Hom. *ιδέω* beside *εἰδέω*, § 836 p. 373. I conjecture that *ro-fetar* originally meant 'I have

learnt', hence its present meaning 'I know', cp. *seiss* § 833 p. 370. The phonetic rules however permit of another derivation, from *\*uid-is-*, in which case it would come near to Lat. *vīdis-tis*.

## II. *ʳs*-stems.

§ 839. Aryan *-iṣ-* in Sanskrit and in the Gatha dialect of the Avesta.

In the Gathas we find three forms. 1<sup>st</sup> sing. conj. *xšnev-iṣ-a* from *xšnu-* 'to attach oneself' (cp. *xšnao-še-mna-* § 833 p. 371), indic. mid. *civ-iṣ-ī civ-iṣ-tā* from *ku-* 'to look away to something, to hope'; *ī* is probably to be read *ī*, as often.

The formation is common in Sanskrit. As regards the 2<sup>nd</sup> pl. mid. in *-iḍhvam*, as *ājanīḍhvam*, it is to be noted that *-iḍh-* is due to the analogy of the other persons which have *-iṣ-* instead of *\*-iḍh-* = *\*-iḍḍh-* (I § 591 pp. 447 f.).

Usually with *e*-grade (1<sup>st</sup> Strong Grade) in the root. *ā-star-iṣ-am* from *star-* 'to strew'. 2<sup>nd</sup> sing. mid. *kṣan-iṣ-ṭhas* from *kṣan-* 'to wound'. 3<sup>rd</sup> sing. mid. *yām-iṣ-ṭa* from *yam-* 'cohibere'. 2<sup>nd</sup> dual *cay-iṣ-ṭam* from *ci-* 'to put in layers, collect'. 3<sup>rd</sup> sing. mid. *ā-nav-iṣ-ṭa* from *nu-* 'to praise'. *ā-dharṣ-iṣ-ur* from *dharṣ-* 'to be brave, dare'. Conj. *jambh-iṣ-a-t* from *jambh-* 'to snap at'. *ā-ṣas-iṣ-am* from *ṣas-* 'to praise'. 3<sup>rd</sup> pl. mid. *ā-bōdh-iṣ-ata*, conj. *bōdh-iṣ-a-t* from *budh-* 'to awake, notice'. 3<sup>rd</sup> sing. mid. *ā-sah-iṣ-ṭa* opt. *sah-iṣ-ī-māhi* from *sah-* 'to subdue'. 3<sup>rd</sup> pl. *āj-iṣ-ur* from *aj-* 'agere'.

Other grades of root. *ā-bhār-iṣ-am* from *bhar-* 'to carry'. *ā-tār-iṣ-am* conj. *tāriṣ-a-t* opt. *tāriṣ-ī-mahi* from *tar-* 'to carry across, pass through'. 3<sup>rd</sup> pl. mid. (pass.) *ā-nāy-iṣ-ata* from *nī-* 'to lead'. Opt. *iḍh-iṣ-ī-mahi* from *iḍh-* 'set afire'. Opt. *gm-iṣ-īya* from *gam-* 'to go'.

As the root of 2<sup>nd</sup> sing. mid. *pūr-iṣ-ṭhas* (*par-* 'to fill') shows it to have been based upon verbal forms like *par-dhī*, so also the *iṣ*-aorist is often made from a characterised present stem. 3<sup>rd</sup> sing. mid. *ā-dad-iṣ-ṭa* beside *dā-da-ti dā-d-a-ti* from

*dā* 'to give' (cp. Osc. *didest*, § 837. 1 p. 374). 3<sup>rd</sup> sing. mid. *āindh-iṣ-ṭa* opt. *indh-iṣ-īya* (also *idh-iṣ-*) beside *in(d)dhē* pl. *indh-ātē* from *idh-*, *ā-dṛh-iṣ-am* beside *dṛh-a-ti* from *darh-* 'to make firm' (cp. Lat. *junger-e-m* § 837. 2 p. 374). *āṭps-iṣ-am* beside *ṭp-sa-ti* from *āp-* *ap-* 'to attain', 1<sup>st</sup> sing. mid. *jīñas-iṣ-i* beside *ji-jñā-sa-tē* from *jñā-* 'to learn'. 3<sup>rd</sup> pl. mid. *ā-hlāday-iṣ-ata* beside *hlād-aya-ti* causal of *hlād-* 'to refresh, give life to', 2<sup>nd</sup> sing. mid. *pyāyay-iṣ-ṭhas* beside *pyāy-āya-ti* causal of *pyā-ya-tē* 'swells' (§ 796 p. 333). Compare 1<sup>st</sup> sing. pres. mid. *gāy-iṣ-ē* beside *gā-ya-ti* 'sings' (§ 656 p. 191).

The origin of the *siṣ-* aorist is like that of the latter group of forms. 3<sup>rd</sup> pl. *ākṣiṣ-ur* beside pres. *ak-ṣa-tē* (§ 659 p. 194) and beside aor. *āk-ṣ-i* (§ 655 p. 189) from *aṣ-* *aṣ-* 'to attain'. *hāsiṣ-am* beside pres. *hā-sa-tē* (§ 659 p. 195) and beside aor. *ā-hā-s-am* (§ 814 p. 353) from *hā-* 'to go, yield'. 3<sup>rd</sup> sing. mid. *ā-bhasiṣ-ṭa* (gramm.) beside pres. *bhā-sa-ti* (aor. *ā-bhas-ī-t*, gramm.) from *bhā-* 'to shine'. Compare the fut. *akṣiṣya-ti* *bhāṣiṣya-tē* § 750. 2 p. 272. So again *ā-jñā-siṣ-am* beside *ā-jñā-s-am* (cp. Lat. *gnōri-tur*), *ā-gā-siṣ-ur* conj. *gā-siṣ-a-t* beside 1<sup>st</sup> sing. mid. *gā-s-i* from *gā-* 'to sing', *ra-siṣ-am* beside 3<sup>rd</sup> sing. mid. *ā-ra-s-ta* from *ram-* 'to be quiet'. Compare with these *siṣ-* aorists, which had not become common in Vedic, Gr. *ἔειπεν* § 836 p. 374, and Lat. *dixis-tis* *dixer-ō* *dixer-i-m*, § 841.

Remark. In Mss. of the Veda occur forms with -*ṣiṣ-* instead of -*siṣ-*, as *pyā-ṣiṣ-i-mahi*. This shows the same phonetic change as *ṣuṣ-ka-s* for *\*suṣka-s* I § 587. 4 p. 413. Compare Whitney, Am. Journ. Phil. vi 277; Bloomfield and Spieker, Journ. Amer. Or. Soc. xiii 118.

The 2<sup>nd</sup> and 3<sup>rd</sup> sing. of the aorists with -*iṣ-* and -*siṣ-* ended regularly in -*ī-ṣ* and -*ī-t*, as *ā-stari-ṣ* -*t* beside *ā-stariṣ-am*, *ā-yāsi-ṣ* -*t* beside *ā-yāsiṣ-am*. The original endings must have been *\*-iṣ(-ṣ)* and *\*-iṣ(-t)*. That of the 3<sup>rd</sup> sing. is still seen in injunctive forms like *aviṣ-t-u* (§ 909), and the influence of the 2<sup>nd</sup> sing. can be made out in aorist forms such as *ā-jay-i-t* (§ 574 p. 115). -*ī-ṣ* *ī-t* cannot be got out of *\*-iṣ-ṣ* and *\*-iṣ-t*. They rather belonged in origin to our IX<sup>th</sup> Present Class, and were not sigmatic aorist at all; *ā-star-ī-t* is like *ā-rōd-ī-t*

*á-brav-ī-t* (§ 574 p. 116). As *á-star-ī-t* is to *stara-ti*, so is *á-hās-ī-t* to *hā-sa-tē*, and *á-bhās-ī-t* to *bhā-sa-ti*.<sup>1)</sup> These forms in *-īš -īt* took the place of *\*astariš \*ahasiš* (2<sup>nd</sup> and 3<sup>rd</sup> sing.) because it then became possible to distinguish the persons; then *-īš* and *-īt* drove *\*iš \*it* out of the field altogether. Compare *ī* instead of *i* in *á-dhī-mahi*, *mṛ-ñī-mās* and the like § 498 p. 62. How *-siš -sit* passed afterwards from the *siš*-aorist to the *s*-aorist, see in § 816 p. 354.

§ 840. Greek. Here *-ao-* = *-əs-* is found only in such verbs as use the *s*-suffix outside of the aorist stem. Attention should be called to the future in *-aw*, if it was conj. of the *σ*-aorist (§ 747 p. 269, § 757 pp. 276 f.), and the indic. 2<sup>nd</sup> sing. in *-ao-θης*, if it had a share in originating the *θην*-aorist (§ 589 pp. 129 ff.). E. g. *κρεμάω ἐκρεμάσθης* from *κρεμιω*- 'to hang' (*κρεμασ-τό-ς*) beside *κρεμα-* (*κρέμα-μαι κρεμά-θῃ*), *κεράω ἐκεράσθης* from *κερασ-* 'to mix' (*κερασ-τό-ς κεκέρασται*), *σκεδάω ἐσκεδάσθης* from *σκεδασ-* 'to scatter' (*σκεδασ-τό-ς ἐσκεδάσται*). On the *σσ*-aorists *ἐκρέμασ(σ)α ἐκέρασ(σ)α ἐσκεδάσσω*, see § 842.

In Keltic, *-əs-* may be looked for in the *s*-preterite of the 1<sup>st</sup> and 2<sup>nd</sup> Conjugations, as O.Ir. *ro-charus* Mid.Cymr. *cereis* 'I loved'. For the Britannic dialects only *-ās(s)-* and not *-as(s)-* may be assumed. 3<sup>rd</sup> sing. O.Ir. *ro-char* for *\*-caras-t*, 2<sup>nd</sup> sing. depon. *-asser* for *\*-as-thēs + r* (Thurneysen, Idg. Forsch. I 463). Also found, pl. *ro-charsam -charsid -charsat* for *\*carassomo(s) \*carassete \*carassont(o)*. Thurneysen, who sends me this explanation of *ro-char*, throws out the question whether *as* did not come from forms in which *st* originally was: the 2<sup>nd</sup> pl. *\*caras-te* became *\*carasse*, this was enlarged to *\*carassete* by adding the usual ending of the 2<sup>nd</sup> pl., and then by analogy *\*carassomo(s)* etc. May we venture to suggest a parallel with the relation of Gr. *ἐκρεμάσ-θης* (see above) and *ἐκρέμασσα* (§ 842)?

1) Jackson believes that he has found an Avestic 2<sup>nd</sup> sing. of this kind in *frā-dahiš* Yt. 8. 2, from *√dā-* (Proceed. Am. Or. Soc., Oct. 1889, p. CLXV).

III. *īs-* stems.

§ 841. In Latin, *-is-* appears in the inflexion of the perfect stem. Indicative only *-is-tis -is-ti* and *-erunt*, if the last is for *\*-is-ont(i)* (§ 1023); Conjunctive (fut. perf.) *-erō -erimus* for *\*-i-s-ō \*-is-i-mus*: Optative (conj. perf.) *-erim -erimus* for *\*-is-ī-*, and in the late-born pluperf. with *-eram* = *\*-is-ā-m*. *vīdis-tis*: cp. Skr. *vēdiṣ-* Gr. *είδ(σ)-*; *iis-tis* for *\*ēis- \*ēi-is-*: cp. Skr. *ayiṣ-* Gr. *έι(σ)-*. *lūquis-tis*, *fīdis-tis vīcis-tis*. And doubtless *fūgis-tis rūpis-tis jūvis-tis* (*juv-* for *\*diugū-*, beside Lith. *džiaugiu's* 'I am glad') with *ū* = Idg. *ey*. *vertis-tis scandis-tis*. Also *scābis-tis cāvis-tis*, *fōdis-tis* and *lēgis-tis vēnis-tis* may come in here, the last two to be compared with Gr. *γῆρας* (§ 834 p. 371).

Remark. Since so many kinds of forms have contributed to the Latin perfect (§ 867), it is impossible to restore with any certainty the proper vowel grades of the root. As regards *ē*, for instance, in the system of *lēgī*; (1) this may have come from *lēgis-tis* as suggested, (2) *lēgimus* may follow the analogy of *sēdimus* for *\*se-zd-*, as Skr. *pṛtimā* follows *sēdimā* (§ 471 p. 16), (3) *lēg-i vēn-i* may be non-thematic, like Goth. *qēm-um* Skr. *sāh-vās-* (loc. cit.), or (4) *lēgi-t* may = pr. Ital. *\*lēg-e-d*, and be a thematic preterite form related to *legi-t* as Gr. *μῆτε-ται* to *μῆτε-ται*, Skr. *sāha-ti* to *sahā-tē* (§ 480 Rem. p. 28, § 514 p. 81).

Phonetic law forbids our assuming that *-es-* has been weakened to *-is-* in *vīdis-tis* (*vīdis-sem* § 842); cp. *scelestu-s capessō* and the like. It is not a sufficient explanation to say that *-e-* became *-i-* because of *-imus*, or that the relation of *amāmus*: *amāssem* produced *vertissem* beside *vertimus* (Bartholomae, Bezz. Beitr. xvii 112). Nothing is left but to hark back to Idg. *-i-s-*.<sup>1)</sup> In § 834 p. 371 we compared *cini-s* Gr. *θίμι-σ-*. Compare further *αἴψ-ι-σ-* in *ἐνάϊσ-το-ς ἥϊσ-(σ)α* from

1) I will here give a possible way of identifying Lat. *-is-* with Idg. *-es-* or *-əs-*; but I do not believe that any one will adopt it. *\*ste-ti-tis* *\*ste-ti-fī* or *-bī* (Gr. *ἔ-στα-τε* Skr. *ta-sṭhi-tha*), *\*tu-tūdi-tis* *\*tu-tūdi-fī* (Gr. *τε-τῶδα-τε* Skr. *tu-tōdi-tha*), *\*scidi-tis* (Skr. *ā-chida-ta*) become *stetistis stetistī*, *tutudistis tutūdīstī*, *scidistis* on the analogy of *\*vīdes-tis* *\*vīdes-tī*; and then by reciprocal analogy, these became *vīdis-tis -tī*.

*ákw* 'I hear' for \**áfis-ω* and in *áíσ-θέ-σθαι* beside Skr. *áv-a-ti* 'regards, favours,') *áf-i-σ-* in *áíσ-θω* 'I breathe out' beside *áio-ν* (doubtless for \**áfis-ο-ν*) beside *ǎ(F)-η-μυ* 'I blow, breathe', variant stem *áf-εσ-* in *ǎσθμυ* (*áíσ-θω* : *ǎσ-θμυ* = Lat. *vīdis-* : Gr. *εἰδε(σ)-*). Further, *άλ-ίσκω-μαι* *ǎρ-ǎρ-ίσκω* beside *ǎρ-ί-σ-κω* (§ 673 p. 206). Lastly, Skr. *á-grah-i-ṣ-am*, where I hold *-i-* to be merely an ablaut variant of the *-i-* now under discussion. If, as we must assume, it was in proethnic Latin that *-is-* spread from the verbs to which it properly belongs to all others, then according to I § 33 p. 33, *-er-* in *vīderō* etc. must be derived in all instances from *-is-*. Thus e. g. *verterō* will be for \**vertisō* (but *verterem* for \**vertesē-m*).

*vīdera-m* shows the same *a*-suffix as *-bam eram* (§ 583 p. 124), and probably it is due to analogy, being made to complement *vīderō* like *eram* : *erō*. Observe that *dīxō dīxim* have no \**dīxam*.

The endings of *vīdistis -istī vīderō vīderim vīderam vīdissem* were transferred both to forms like *totondī tetigī* and to those like *dīxī*, so that we have *totondistis totonderō* and *dīxistis dīxerō* etc. The former may be compared with Gr. *πεποιθέμ* (§ 836 p. 373), the latter with Skr. *áyasiṣam* (§ 839 p. 376). The efficient cause of these new formations may have been that in the Indicative many of the original forms of the 2<sup>nd</sup> sing. and pl. had become rather awkward, as 2<sup>nd</sup> sing. \**totons(s)ī* 2<sup>nd</sup> pl. \**totons(s)is* (or \**totonstī* \**totonstis* with *t* restored from *estis*) and 2<sup>nd</sup> sing. \**dīx(s)* 2<sup>nd</sup> pl. \**dīxtis*.

We proceed to mention the *īs*-aorists of Latin and Irish belonging to *īo*-present stems (Class XXVI):

In Latin, those verbs whose 2<sup>nd</sup> sing. indic. pres. ended in *-īs*, had the *ē*-conjunctive in *-īrem*, as *farcīrem* from *farcīō*. The only exception is *fīrem* like *agerem*, § 837.2 p. 374. But from verbs like *capiō -īs* the conj. was *-ērem*, *capērem*; and it remain suncertain whether this be for \**-is-ē-m* or \**-es-ē-m*, cp. *cāpis-sō* and *capēs-sō* § 842.

1) To assume a 'Root' *avis-* for *áiov* and a present \**ǎfíσω* I hold to be wrong (Schulze, Kuhn's Zeitschr. XXIX 249 ff.).

It must be remembered, in considering Lat. *farcĭrem* and the like, that these went hand in hand with the original denominatives in *-i-ǵō*, as *fīniō*, whose *s*-aorist, *fīnĭrem*, is to be compared with Gr. ἐκόνισα O.C.Sl. *gostichŭ* (§ 813 p. 351). Hence the question presents itself — whether *farcĭrem* is really like Skr. *á-grahiṣ-am*, whether it was not rather produced simply by the analogy of the *ts*-formation. In this case it might be compared with O.C.Sl. *bichomŭ* (§ 727 p. 257), which was modelled upon *gostichomŭ*.

In the *s*-aorist of the *ǵo*-present (3<sup>rd</sup> Conjugation) in Irish, the 3<sup>rd</sup> sing. ended with *\*-i-s-t*, as *-lēic* for *\*leikŷis-t*. A short *i* is seen also in Mid.Cymr., which in this aorist had *-yss-*, e. g. *eisteddyssant* 'they sat'. Compare § 840 on *ro-char* for *\*-caras-t*. The question which there had to be answered on behalf of *ro-charsam*, now crops up again for *-lēcsem*. Hand in hand with these *ǵo*-verbs went those in *\*-i-ǵō* and those in *\*-éǵō*, as 1<sup>st</sup> sing. *do-ro-dalius* from *-dālim* 'I divide', 1<sup>st</sup> pl. *ro-moit-sem* from *moidim* 'I extol'.

#### C. STEMS WITH *-s-s-*.

§ 842. As the *s*-suffix was in no sense a special aorist suffix, but was used in the parent language with other tenses of a certain number of verbs, it need not surprise us to see that verbal *s*-stems often make an aorist with a second *s*. Analogous formations with *-əs-* have been brought before us in § 839, the Sanskrit aorist series of which one is *ák-ṣiṣ-ur*.

Greek. Hom. ἔ-σπασ-σα Att. ἔσπασα from σπάω 'I pull' for *\*σπα-σω*, ἔ-σπασ-ται. ἔ-κλασ-σα from κλαίω 'I break off' for *\*κλα-σω*, κέ-κλασ-ται. ἰ-κρέμασ-(σ)α 'I hung' ἰ-κέρασ-(σ)α 'I mixed' ἑ-σκέδυσ-(σ)α 'I scattered' beside κριμασ-τό-ς κε-κέρασ-ται ἑ-σκέδασ-ται. (f)-ἱ-σ-(σ)α 'I clothed' beside 2<sup>nd</sup> sing. ἔσ-σαι. ἔ-σβ-εσ-(σ)α 'I quenched' beside σβ-εσ-τό-ς ἔσβ-εσ-ται. ἐ-κόρεσ-(σ)α 'I satisfied' beside κε-κόρεσ-ται. ἀρ-έσ-(σ)ασθαι 'to come to an understanding'

beside ἀρεσ-τό-ς. ἰ-κάλεσ-(σ)α 'I called' ἄλ-εσ-(σ)α 'I ground' ἔμ-εσ-(σ)α 'I spewed' from the presents καλέω ἀλέω ἐμέω, perhaps for \*καλεσω \*ἀλεσω \*ἐμεσω. εἶρυσ-(σ)α ἔρυσ-(σ)α 'I pulled' beside εἶρυσ-ται. Compare § 575 p. 117, § 656 p. 191, § 661 p. 196, § 836 p. 372 f., § 840 p. 377.

**Remark.** There is too little support for the theory that these Greek *an*-aorists stand in a direct historical connexion with the Sanskrit *siṣ*-aorist, — that originally the singular active had *-ses-* (*-ss-*) and the plural *-ss-*, and that Sanskrit kept only the singular form, Greek the form of the plural (W. Schulze, Kuhn's Zeitschr. xxix 266 ff.).

*Italic.* With Lat. *vīsō* for \**ueiō-sō*, *quaesō* for \**quais-sō* (§ 662 p. 197), compare *petes-sō* O.Lat. *ad-petis-si-s*, *capes-sō* O.Lat. *capis-sa-m*, *laces-sō*, *faces-sō*. And to the same group as *faxō faxitur faxim* (§ 824 p. 362) belong *amās-sō amāssim*, *turbās-situr*, infin. *averruncās-sere*; *habēs-sō pro-hibēssim*, *licēssit*; *amb-īssim*; *-ss-* after a long vowel, which should be *-s-*, is due to the analogy of forms with *-ss-* following a short vowel, cp. *ēssem* instead of \**ēsem* (*edō*) on the analogy of *ēssem* (from *sum*). With *petissis capessam* are associated forms like *vidis-se-m*, *ē*-conjunctives, whose analogy produced (1) *totondissem* and (2) *dixissem* etc. The forms with *-is-s-* have their nearest parallels in Gr. *ῥισ(σ)α* from *ῥι-σ-* (§ 841 p. 378 f.).

### THE PERFECT.<sup>1)</sup>

§ 843. The chief marks which keep the Idg. Perfect distinct from Present and Aorist are two. (1) Firstly some peculiar personal endings in the Indicative; as from √*uei*d-

1) On the Indo-Germanic Perfect in general. H. Osthoff, Zur Geschichte des Perfects im Idg. mit besonderer Rücksicht auf Griech. und Latein., Strassb. 1884. C. Pauli, Das praeteritum reduplicatum der idg. Sprachen und der deutsche Ablaut, Kuhn's Zeitschr. xii 50 ff. Pott, Verschiedene Bezeichnung des Perfects in einigen Sprachen und Lautsymbolik, Zeitschr. für Völkerpsych. xv 287 ff., xvi 117 ff.



'to know, see': 1<sup>st</sup> sing. Skr. *véd-a* Gr. *οἶδ-α* Goth. *váiit*, 2<sup>nd</sup> sing. *véttha oloða váist*, 3<sup>rd</sup> sing. *véd-a oīð-ε váit*. (2) Secondly, the participle active formed with the suffix *-yes-*, as Skr. *vid-vás-*

Aryan. Bartholomae, Die ai. *ē*-Formen im schwachen Perfect, Kuhn's Zeitschr. xxvii 337 ff. *Idem*, Der 'Bindevocal' *i* im avestischen Perf., Ar. Forsch. ii 97 ff.

Greek and Latin. Ernault, Du parfait en grec et en latin, Paris 1886.

Greek. H. Malden, On Perfect Tenses in Greek, and especially the First Perfect Active, Trans. Phil. Soc., 1865, pp. 168 ff. Loebell, Quaestiones de perfecti Homerici forma et usu, Leipz. 1877. H. von der Pfordten, Zur Gesch. des griech. Perfectums, Munich 1882. J. Stender, Beiträge zur Gesch. des griech. Perfecta, 2 Theile, München-Gladbach 1883—84. R. Fritzsche, Über griech. Perfecta mit Präsensbedeutung, Sprachwiss. Abhandl. aus G. Curtius' Gramm. Gesellsch. pp. 43 ff. H. Uhle, Die Vocalisation und Aspiration des griech. starken Perf., *ibid.* pp. 59 ff. Mahlow, Einige altertümliche Perfectbildungen des Griech., Kuhn's Zeitschr. xxiv 293 ff. J. Schmidt, Die Entstehung der griech. aspirierten Perfecta, *ibid.* xxvii 309 ff. *Idem*, Noch einmal die griech. aspirierten Perfecta, *ibid.* xxviii 176 ff. Alex. Hoppe, Über das griech. zweite Perfect, Festprogr. des Erfurter Gymn., Erfurt 1870, pp. 34 ff. The Author, Der Ursprung des griech. schwachen Perfects, Kuhn's Zeitschr. xxv 212 ff. F. Hartmann, Wieder einmal das *α*-Perfectum, *ibid.* xxviii 284 ff. K. F. Johansson, Über das griech. *α*-Perfect, in: Beitr. zur griech. Sprachk., Upsala 1890, pp. 33 ff. F. W. Walker, Greek Aorists and Perfects in *-α*, Class. Review v 446 ff.

Italic. A. Harkness, On the Formation of the Tenses for Completed Action in the Latin Finite Verb, Trans. Amer. Phil. Assoc. v 14 ff., vi 5 ff. Platzer, Die Lehre von den lat. Perfectis und Supinis, Neubrandenburg 1840. Lattmann, Das Gesetz der Perfect- und Supinbildung im Lateinischen, Zeitschr. f. d. Gymnasialw. N. F. ii (1868) pp. 94 ff. M. Kinke, Die Zeitwörter der latein. 3. Conjugation in ihren Perfectformen, Heiligenstadt 1843. Schleicher, Der Perfectstamm im Lateinischen, Kuhn's Zeitschr. viii 399 f. Fr. Müller, Über das lat. Perfectum, Sitzungsber. d. Wien. Akad. LXvi 225 ff. Corssen, Zur Bildung des Perfectums, in: Beitr. zur ital. Sprachk., pp. 503 ff. W. Deecke, De reduplicato linguae Latinae praeterito, Leipz. 1869. E. Frohwein, Die Perfectbildungen auf *vi* bei Cicero, ein Beitrag zum Sprachgebrauch C.'s und zugleich ein Supplement zu F. Neue's Formenlehre, Gera 1874. L. Havet, Les prétendus parfaits en *-āvi*, Mém. Soc. lingu. vi 39. W. Schulze, Das lat. *ε*-Perfectum, Kuhn's Zeitschr. xxviii 266 ff. G. Curtius, Über das lat. Perfect auf *vi* und *ui*, Ber. d. sächs. Gesellsch. d. Wiss. 1885 pp. 421 ff. P. Regnaud, Les parfaits composés en latin, Lyon 1882. L. Scheffler, De perfecti in *vi* exeuntis formis apud

Gr. εἰδ-ούς O.C.Sl. *sta-vü* from  $\sqrt{\text{sta-}}$  'stand' (II § 136 pp. 438 ff.).

Except in Armenian and Balto-Slavonic, the pr. Idg. Perfect remained in all branches of the language a large and comprehensive group. It was least changed in Aryan, Keltic, and Germanic. In Greek it was mixt up with a  $\kappa$ -formation, and in Italic with a whole series of non-perfect tense forms.

The proethnic perfect forms may be divided into two groups according to the stem.

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poetas Latinos dactylicos occurrentibus, Marburg 1890. Th. Birt, Verbalformen vom Perfectstamme bei Claudian, Archiv f. lat. Lexikogr. iv 589 ff. H. Kern, Das osk. Perfect auf *-tte*, Kuhn's Zeitschr. xxi 240 ff. Danielsson, Zum altital. *t*-Perfect, Pauli's Altital. Stud. iv 133 ff.

Keltic. Windisch, Das reduplicierte Perfectum im Irischen, Kuhn's Zeitschr. xxiii 201 ff.

Germanic. W. Scherer, Die reduplicierten Präterita, Zeitschr. f. österr. Gymnas. xxiv 295 ff., and Zeitschr. f. deutsch. Altert. xix 154 ff., 390 ff. Sievers, Die reduplicierten Präterita, Paul-Braune's Beitr. i 504 ff. Pokorny, Über die reduplicierten Praeterita der germ. Sprachen und ihre Umwandlung in ablautende, Landskron 1874. Holthausen, Die reduplicierenden Verba im German., Kuhn's Zeitschr. xxvii 618 ff. G. Burg-hauser, Die Bildung des germ. Perfectstammes vornehmlich vom Standpunkte der idg. Vocaleforschung. Prag 1887. Ljungstedt, Anmärkningar till det starka preteritum i germanska språk, Upsala 1887. R. E. Ottmann, Die reduplicierten Praeterita in den german. Sprachen, Alzey 1890. G. Holz, Die im Got. noch reduplicierten Perfecta, in: Urgerm.  $\tilde{z}$  und Verwandtes (Leipz. 1890) pp. 21 ff. H. Lichtenberger, De verbis quae in vetustissima Germanorum lingua reduplicatum praeteritum exhibeant, Nancy 1891. J. Grimm, Die ahd. Praeterita, Germania iii 147 ff. J. Hoffory, Die reduplicierten Praeterita im Altnord., Kuhn's Zeitschr. xxvii 593 ff. C. Pauli, Über die deutschen Verba praeteritopraesentia, Stettin 1863. Osthoff, Das praeteritopraesens *mag*, Paul-Braune's Beitr. xv 211 ff. Aufrecht, Eine altnord. Aoristform, Kuhn's Zeitschr. i 474 ff. Von Knoblauch, Die germ. Perfecte auf *r*, *ibid.* i 573 ff. Schweizer-Sidler, *r* im altd. Praeteritum, *ibid.* ii 400. Müllenhoff, Angebliche Aoriste oder Perfecta auf *r* im Altnord. und Hochd., Zeitschr. f. deutsch. Altert. xii 397 ff. Zarncke, Zu den reduplicierten Praeteriten, Paul-Braune's Beitr. xv 350 ff. J. von Fierlinger, Die 2. ps. sg. perf. starker Flexion im Westgerm., Kuhn's Zeitschr. xxvii 430. Works on the weak Germanic Preterite are given under § 907.

(1) Reduplicated Stem, with *o* in the root syllable of the 3<sup>rd</sup> sing. indic. act., if the root belonged to the *e*-series. E. g. \**ge-gon-*, \**ge-gn-* \**ge-gn-* from  $\sqrt{\text{gen-}}$  'gignere': Gr. *γέγονε* *γί-γα-μεν*, Skr. *ja-ján-a ja-jñ-úr*.

(2) Unreduplicated Stem. Sometimes the ablaut is the same as in (1), as \**uoid-* \**uid-* from  $\sqrt{\text{ueid-}}$ : Gr. *οἶδ-ε ἰδ-μεν*, Skr. *véd-a vid-má*. Sometimes different, as with *ē* in roots of the *e*-series; e. g. \**mēd-* from  $\sqrt{\text{med-}}$  'measure': O.Ir. *ro mīd-ar* Goth. *mēt-um*; \**sēd-* from  $\sqrt{\text{sed-}}$  'sit': Goth. *sēt-um* Lith. *sēd-ēs*; \**sēgh-* from  $\sqrt{\text{segh-}}$  'conquer, hold': Skr. *sāh-vās*.

In perfect stems like \**ge-gon-* or \**uoid-* the *o*-grade prevailed in the 2<sup>nd</sup> and 3<sup>rd</sup> sing. Indic. Active (*οἶσθαι οἶδε*), and, in the opinion of most scholars, the 1<sup>st</sup> sing. as well (*οἶδα*); the *e*-grade in the Conjunctive (*εἶδ-ο-μεν*) Skr. *ta-tán-a-n*), and, according to some scholars, in the 1<sup>st</sup> sing. Indic. Active too (*πέφικε-α*); the weak grade in the plural and dual Active, and right through the Indicative Middle (*γέ-γα-μεν ἔ-ιχ-τον τέ-τραπ-ται* Skr. *ni-ny-úr ni-ny-ē*), and in the Optative (Skr. *va-vṛt-yā-t* Goth. *vaúrþ-ei-ma*). To *o* in \**ge-gon-e* answers *ō* in \**se-sō-* (Gr. *ἀφ-έωκε* Goth. *sat-sō*) from  $\sqrt{\text{sē-}}$  'send forth, sow'.

Remark. Considering that the ending of the 1<sup>st</sup> sing. indic. act. was Idg. *-a*, while that of the 3<sup>rd</sup> sing. was Idg. *-e*, there is a difficulty in the difference between Skr. 1<sup>st</sup> sing. *ja-ján-a* and 3<sup>rd</sup> sing. *ja-ján-a*. I have identified *jajána* with *γέγονε* (I § 78 p. 69). De Saussure (*Mém. sur le syst. prim.* 72 f.) and Osthoff (*Perfect*, 61) equate *jajána* = Idg. \**gegena*, on which view *γίγονε* would be due to levelling and should be \**γεγενα*; and as a matter of fact no difficulty worth mentioning faces this view. From the standpoint of those scholars who deny that Idg. *o* becomes Ar. *ā* in open syllables, no explanation of Skr. *jajána* has been found which is in the smallest degree satisfactory (see the last attempt in Bechtel, *Die Hauptprobleme der idg. Lautlehre*, 57, 165); cp. § 790 p. 322 on the *ā* of *bhāraya-ti*. It may be observed in passing that the means lately used by J. Schmidt to combat my theory of this Aryan *ā* are very little calculated to help in solving the point (see Kuhn's *Zeitschr.* xxxi 472 footnote). A long list of authorities and ex cathedra statements will never decide the matter; this can only be done by constant and scrupulous examination of the facts. Perhaps the question may be helped to a conclusion by the study of Indo-Germanic accent which has lately been taken up.

§ 844. When the root ends in a consonant, some part at least, large or small, of the indicative forms in all the different languages have a short vowel before those personal endings which begin with a consonant.

Sanskrit. -i- in 2<sup>nd</sup> sing. act. *ds-i-tha ru-rôj-i-tha* (but *vêt-tha ta-tân-tha*), 1<sup>st</sup> pl. act. *pa-pt-i-má* (but *yu-yuj-má vid-má*), 2<sup>nd</sup> sing. indic. mid. *ûc-i-šē ja-jñ-i-šē* (but *da-dṛk-šē*), 3<sup>rd</sup> pl. mid. *ja-jñ-i-rē*, to which answers Avest. *vaoz-i-rem*, cp. Skr. partic. act. *pa-pt-i-vás-* (but *da-dṛś-vás- vid-vás-*).<sup>1)</sup> In Vedic this *i* is found only when the preceding syllable is long. In Avestic, -ama in *daiđy-ama* beside pass. *di-đae-iti* (§ 537 p. 97).

Greek shows -α- in the 1<sup>st</sup> and 2<sup>nd</sup> pl. *τε-τράφ-α-μεν τε-τράφ-α-τε* (but *ἴδ-μεν εἰλήλουθ-μεν ἴστε*). Compare partic. *πεντώς* for *\*πι-πτ-α-φώς*, answering to Skr. *pa-pt-i-vás-* (but *εἰδ-(f)ώς*), and the mid. *πέ-πτ-α-μαι* beside *πετ-ά-σαι*. On -ας beside -θα in the 2<sup>nd</sup> sing., see p. 386.

Latin. 1<sup>st</sup> pl. *tu-tud-i-mus sēd-i-mus*.

Old Irish. 1<sup>st</sup> pl. *ce-chn-ammar* 2<sup>nd</sup> pl. *ce-chn-aid*.

Gothic. 1<sup>st</sup> pl. *vit-um sēt-um skat-skáid-um* 2<sup>nd</sup> pl. *vit-u-þ sēt-u-þ skat-skáid-u-þ*.

It is hard to decide when or how this intermediate vowel was to be found in the various perfect schemes of the parent language (for the same scheme did not do duty for all perfects). Perhaps then, as in the Veda, the quantity of the preceding syllable had something to do with it.

What complicates the problem greatly is the suspicion that so many forms may have been changed by analogy. In Aryan, Greek, and Italic the question arises whether forms with the intermediate vowel were not influenced by forms from a root ending in a long *a*-vowel, as Skr. *ta-sthi-má* Gr. *ἔ-στα-μεν* Lat. *ste-ti-mus* (for *stetimus* cp. however § 869). In Greek, Italic, Celtic, and Germanic the 3<sup>rd</sup> pl. has an *nt*-suffix, Gr.

1) I do not here consider the *a* of the 2<sup>nd</sup> and 3<sup>rd</sup> dual active *viddihur viddtur*, because it may have been identical with that of the 2<sup>nd</sup> and 3<sup>rd</sup> pl. *vid-á* and 3<sup>rd</sup> sing. *véd-a* (§ 1088).

-αντι -ατι (mid. -αται), Umbr.-Osc. -ens, O.Ir. -atar and Goth. -un; and it is quite possible that the vowel of these endings passed on to other persons. In Greek, there was mutual attraction between the perfect and s-aorist, because one or two personal endings were the same, τέτροφ-α -ε having the same suffixes as ἐδείξ-α -ς (beyond doubt τέτροφ-ας follows ἐδείξ-ας, and in later Doric γέγον-αν follows ἐδείξ-αν); then which came first, τετράφ-α-μεν -ατε or ἐδείξ-α-μεν -ατε? In Italic, again, as early as the proethnic stage, the old perfect had got mixt up with thematic aorist. If, for instance, *i* was the thematic vowel in *fu-i-mus tetig-i-mus dix-i-mus* as well as with *fu-i-t tetig-i-t dix-i-t* (cp. pres. *ag-i-mus*), yet it is uncertain whether the -i- of Lat. -i-mus, when used with consonantal roots, was ever anything else but Idg. -o-. Even in Keltic the question meets us whether the plural forms had not the thematic vowel.

Since Avest. *daiḍy-ama* cannot be kept apart from optative forms like *jum-y-ama* (see § 1001), to assume an Idg. suffix -*yme* as variant of -*me* in the perfect seems almost inevitable; and therefore I am inclined to refer to this the Gr. -αμεν in τετράφ-α-μεν etc., and the Goth. -um in *skatiskaid-um* etc.; Lat. -imus and O.Ir. -ammar may also in some cases represent the same. But again the conjecture offers itself that the difference between Skr. *papt-i-má* and *yuyuj-má*, between Gr. τετρά-φαμεν and εἰλήλουθ-μεν, represents a difference of structure like that which exists in Skr. *rud-i-más* (Class IX §§ 572 ff.) and *uś-más* (Class I §§ 492 ff.). It may be that once \**papt-amá* \**sazd-amá* (like Avest. *daiḍy-ama*) and *tasthi-má* (= ἔστα-μεν) *dadhi-má* existed side by side, and that the former were transformed to match the latter and became *paptimá sēdimá*. But proved this cannot be, not even by the Vedic law of quantity. There is always the possibility that the parent language itself possessed perfect stems like \**pe-ptə-* (and thus 1<sup>st</sup> pl. \**pe-ptə-me*).

§ 845. The preterite connected with the Idg. perfect — pluperfect as it is called — which is only found with certainty

in Aryan and Greek, shows the same personal endings as other augmented preterites. Like the conjunctive and optative of the perfect, this cannot be distinguished from the corresponding forms of our V<sup>th</sup> Present Class; see § 485 p. 39, § 555 p. 108.

In the same languages the pluperfect sometimes has thematic inflexion. These forms are to be compared with the corresponding forms of Present Class VI (§§ 561 ff.).

### Proethnic Indo-Germanic.

#### § 846. (A) Reduplicated Perfect.

With roots beginning in a consonant, the syllable of reduplication originally ended in *-e*, no matter what ablaut series the root might belong to. Examples: \**ge-ġon-* \**ge-ġn-* Gr. *γέ-γον-ε* O.Ir. *ro gēnar* (for \**ge-ġn-*) Skr. *ja-jān-a* from √ *ġen-*, \**se-stā-* \**se-stā-* Gr. *ἔ-στα-μεν* Lat. *ste-ti-mus* Skr. *ta-sthāu* from √ *stā-*. But even then there were not lacking perfect forms with *ē* in the reduplicator, which one may call the Intensive Perfect: Gr. *ἐγῆ-γεμ-μεν* Skr. *jā-gār-a* from √ *ger-*. See §§ 471, 472 pp. 15 and 17. The treatment of the initial root-consonants in the reduplicator has been already described, §§ 475 and 476, pp. 20 ff.

It cannot be proved for the parent language, that in roots beginning with a vowel, an *e* (or some other short vowel), serving for the reduplicator, contracted with the root-initial (as some have inferred from Lat. *ēd-ī* Goth. *fr-ēt* Skr. *ad-a* from √ *ed-*, Gr. *ἦχα* O.Icel. *ök* Skr. *aj-a* from √ *aġ-*). It is very likely indeed that all these forms belong to the unreduplicated perfect type. See § 848.

√ *der-* 'split, tear, flay', act. 3<sup>rd</sup> sing. \**de-dór-e* 1<sup>st</sup> pl. \**de-dġ-mé* mid. 1<sup>st</sup> sing. \**de-dr-āġ* (conj. \**de-dér-e-t(i)* opt. \**de-dr-ġē-t* or \**de-dr-iġē-t*): Skr. *dadāra* mid. *dadrē* partic. *da-dġ-vās-*, Gr. *διέδαρται* (Goth. *ga-tar*). √ *smer-* 'remember': Skr. *sa-smār-a*, Lat. adj. *memor* derived from a perf. \**me-mor-t* (§ 476 p. 23). Skr. *kṣur-* Gr. *φθιτο-* 'to cause to run off or

disappear' (§ 812 p. 348): Skr. *ca-kṣār-a*, Gr. *δι-εφθορε ἐ-φθαρ-ται*. Skr. *śa-śār-a* 'he broke up, crushed' pl. *śa-śr-ur* (gramm.) mid. *śa-śr-ē* (O.Ir. *do-ro-chair* 'cecidit'). √ *ger-* 'swallow': Skr. *ja-gār-a*, Gr. *βέ-βρω-ται* (*βρω-* = \**gǵ-*). √ *per-* 'bring, bring forth, give a share' (Lith. *per-iù* 'I brood, incubate, hatch'): (Ir. *πέ-πω-ται*, Lat. *pe-per-i* for \**pe-par-i* (*πω-* *par-* = \**pǵ-*). √ *tel-* 'carry, bear': Gr. *τέ-τλα-μεν*, Lat. *te-tul-i*. √ *gen-* 'gignere': Skr. *ja-jān-a* *ja-jñ-úr* *ja-jñ-ē*, Gr. *γί-γον-ε* *γέ-γα-μεν*, O.Ir. mid. *ro gēnar* (*gēn-* for \**gegn-*). √ *men-* 'think, mean, regard': Skr. 3<sup>rd</sup> dual mid. *ma-mn-ātē* (this may be from stem *mn-a-* as said in § 850), opt. *ma-man-yā-t*, Gr. *μέ-μον-ε* *μέ-μα-μεν*, Lat. *me-min-i* imper. *me-men-tō* (= Gr. *με-μά-τω*), O.Ir. mid. *do-mēnar* instead of pr. Kelt. \**me-mn-* (Goth. *man mun-un*, Lith. part. *min-ēs*). √ *ghen-* 'strike': Skr. *ja-ghān-a* *ja-ghn-ē* conj. *ja-ghān-a-t* part. *ja-ghan-vās-* *ja-ghn-i-vas-*. Gr. *πέ-φα-ται*, O.Ir. 1<sup>st</sup> sing. *ro ge-gon*. √ *ten-* 'stretch': Skr. *ta-tān-a* *tu-tñ-ē* *tu-tan-ē* (*tñ-* = \**tǵn-*) conj. *ta-tan-a-t*, Gr. *τέ-τα-ται*, O.Lat. *te-tin-i*. Skr. *kṣan-* Gr. *κτεν-* 'to wound, kill': Skr. *ca-kṣān-a* *ca-kṣān-ē* (gramm.), Gr. *ἀν-έκτορε*. √ *gem-* 'go': Skr. *ja-gām-a* *ja-gm-úr* *ja-gm-ē* Avest. opt. *ja-γm-yā-þ* Skr. part. *ja-gan-vās-* (I § 199 Rem. 2 p. 168, § 225 p. 193), Gr. *βέ-βα-μεν* (Goth. *gam*, Lith. *gim-ēs* 'come into the world' partic.). √ *klei-* 'bend, incline': Skr. *śi-śrāy-a* *śi-śriy-ē*, Gr. *κέ-κλι-ται*. √ *lei-* 'linere': Skr. *li-ly-ur* *li-ly-ē*, O.Ir. 3<sup>rd</sup> sing. *ro li-l* 3<sup>rd</sup> pl. *ro le-l-dar*. √ *kley-* 'hear': Skr. *śu-śrāv-a* *śu-śruv-ē* conj. *śu-śrav-a-t* opt. *śu-śru-yā-t* *śu-śrū-yā-t*, Gr. imper. *κί-κλυ-θι* beside *κί-κλυκα* (see § 557 p. 109), O.Ir. 1<sup>st</sup> sing. *ro chuala* for \**cōla* \**cu-clov-a* Mid.Cymr. *ci-gleu*. √ *qiey-* 'to move, shift': Skr. *cu-cyuv-ē* Gr. *ἐ-οσι-ται*. √ *ghey-* 'pour': Skr. *ju-hāv-a* *ju-huv-ur* *ju-hv-ē* *ju-huv-ē*, Gr. *κί-χυ-ται*. √ *pley-* 'to swim, float': Skr. *pu-pluv-ur* *pu-pluv-ē*, Gr. *κί-πλυ-ται*. √ *dhey-* 'move violently, shake, take hold': Skr. *du-dhāv-a* *du-dhuv-ē* opt. mid. *du-dhuc-i-ta*, Gr. *τέ-θν-ται*. √ *bhey-* 'become, be': Avest. *ba-vāv-a* 3<sup>rd</sup> pl. *ba-bv-ar* Skr. 3<sup>rd</sup> pl. *ba-bhāv-úr* opt. *ba-bhū-yā-t* partic. *ba-bhū-vās-* (*-āv-* instead of *-uy-* as in *á-bhāv-am* § 497 p. 56 f.; with *ba-bhāv-a* *ba-bhū-tha* compare *á-bhū-t*

Gr. *ἔ-φθ*, loc. cit., and fut. Avest. *bū-šyē-iti* Gr. *q-ḗ-σιν* § 748 p. 271), Gr. *πε-φύ-ασσι πε-φν-ώς* (O.Ir. 3<sup>rd</sup> sing. *ro bōi*, Lith. *bū-vęs* O.C.Sl. *by-vũ*). ✓ *derk-* 'see': Skr. *da-dárs-a da-dṛś-úr da-dṛś-ē*, Gr. *δέ-δορκ-ε* (O.Ir. *ad-con-dairc*). ✓ *uerg-* 'work': Avest. 3<sup>rd</sup> sing. mid. *vā-ver<sup>z</sup>-ōi*, Gr. *ἔ-οργ-ε*. ✓ *merd-* 'crush': Skr. *ma-mard-a ma-mṛd-ur ma-mṛd-ē*, Lat. *me-mord-i me-mord-i-mus momordī momordimus*. ✓ *ters-* 'be dry, athirst': Skr. *tā-tṛṣ-úr* part. mid. *tu-tṛṣ-ānā-s* (Goth. *ga-þars -þaúrs-un* opt. 1<sup>st</sup> pl. *-þaúrs-ei-ma*). ✓ *dhers-* 'be bold': Skr. *da-dhárṣ-a dā-dhṛṣ-ur* conj. *da-dhárṣ-a-t* (Goth. *ga-dars -daúrs-un*). ✓ *uert-* 'turn, give a certain direction or inclination to': Skr. *va-várt-a va-vṛt-úr va-vṛt-ē vā-várt-a vā-vṛt-úr vā-vṛt-ē* (Goth. *varþ vaúrþ-un*). *kl-ep-* 'to steal' (§ 797 Rem. p. 334): Gr. *κλέ-κλοφ-ε* part. Messen. *κλεβ-ώς* mid. *κλέ-κλεπ-ται* (Goth. *hlaf*). ✓ *bhendh-* 'bind': Skr. *ba-bāndh-a ba-bandh-ur* (Goth. *band bund-un*). ✓ *deik-* 'show': Skr. *di-dēs-a di-diś-ē*, Umbr. *de-rsic-ust* for *\*de-dic-* (I § 369 p. 279) fut. perf. 'dixerit' (Goth. *ga-taih -taih-un*). ✓ *bheid-* 'split': Skr. *bi-bhéd-a bi-bhid-úr bi-bhid-ē* (Goth. *bait bit-un*). ✓ *leig-* 'leave': Skr. *ri-réc-a ri-ric-ē* opt. *ri-ric-yā-t*, Gr. *λέ-λοιπ-ε λέ-λειπ-ται* (Goth. *láiho lathv-un* O.H.G. *lēh liu-un*). ✓ *seiq-* 'pour out, strain, filter': Skr. *si-šēc-a si-šic-ē* Ved. *si-sic-ur si-sic-ē* § 475 p. 20 (O.H.G. *sēh sig-un*). ✓ *geys-* 'taste, try, enjoy': Skr. *ju-jōṣ-a ju-juṣ-ur ju-juṣ-ē*, Gr. *γέ-γευ-μαι*, O.Ir. 3<sup>rd</sup> sing. *do-roigu* (Goth. *káus kus-un* O.H.G. *kōs kur-un* opt. 2<sup>nd</sup> pl. *kur-ī-t*). ✓ *bheydh-* 'wake, observe': Skr. *bu-bōdh-a bu-budh-ē* conj. *bu-bōdh-a-s*, Gr. *πέ-πυσται* (Goth. *ana-báuþ -bud-un*). ✓ *bheug-* 'to bend': Skr. *bu-bhōj-a* (gramm.), Gr. *πέ-φενγ-α πε-φνγ-μένο-ς* (Goth. *báug bug-un*). ✓ *jeug-* 'iungere': Skr. *yu-yōj-a yu-yuj-ma yu-yuj-ē*, Gr. *ἔ-ζευκ-ται*. ✓ *reud-* 'weep, lament': Skr. *ru-rōd-a ru-rud-ur* (O.H.G. *rōz ruzg-un*). ✓ *suep-* 'sleep': Skr. *su-śvāp-a su-śup-ur* (O.Icel. *svaf*). ✓ *uegh-* 'vehere': Skr. *u-vāh-a ūh-ur* (Goth. *ga-vag*, Lith. *vẽž-ęs* O.C.Sl. *vez-ũ*). ✓ *pet-* 'fly, shoot through the air, fall': Skr. *pa-pāt-a pa-pt-úr (pēt-ur)* part. *papt-i-vās-*, Gr. *πεπτώς* doubtless for *\*πε-πτu-φώς*. ✓ *seil-* 'sit': Skr. *sa-sād-a sēd-ur*



for *\*sa-zd-*, Lat. *sēd-i* for *\*se-zd-?* (Goth. *sat*). ✓ *dhē-* 'set, place, lay': Skr. *da-dhāu da-dhā-tha da-dhi-mā da-dh-ūr da-dh-ē*, Gr. *τέ-θε-ται*, Lat. *crēdidī* (I § 507 Rem. p. 372), Gall. *de-de* 'dedit' or 'posuit' (O.Sax. *de-du-n* opt. *de-d-i?* § 886). ✓ *sē-* 'send forth, throw, sow': Gr. *εί-ται* for *\*ē-i-ται* Dor. *ἀφ-έω-ται* with *ω* from the active (*ἀφ-έωχα*), Goth. *sat-sō sat-sō-un*. ✓ *dō-* 'give': Skr. *da-dāu da-di-mā dad-ē*, Gr. 3<sup>rd</sup> pl. Boeot. *ἀπο-δεδοάνθι* mid. *δέ-δο-ται*, Lat. *de-d-i*. ✓ *pō-* 'drink': Skr. *pa-pāu pa-pi-mā pa-p-ē*, Gr. *πέ-πο-ται* (act. *πέ-πωχα*), Lat. *bibī* instead of *\*pe-p-i* (following *bi-bō*). ✓ *stā-* 'stand': Skr. *ta-sthāu ta-sthi-mā ta-sthē*, Gr. *ἑ-στα-μεν καθ-ίσταται*, Lat. *ste-t-i ste-ti-mus*. ✓ *skhāit- skhāid-* 'scindere' (§ 521 p. 85): Skr. *ci-chēd-a ci-chid-ē*, Lat. *sci-ciul-i*, Goth. *skai-skāiþ skat-skāid-un*. ✓ *(s)taud-* 'knock': Skr. *tu-tōd-a tu-tud-ūr*, Lat. *tu-tud-i tu-tūd-i*, Goth. *stai-stāut stai-stāut-un*. Ital. Kelt. *kan-* 'sing': Lat. *ce-cin-i* for *\*ce-can-i*, O.Ir. 1<sup>st</sup> sing. *ce-chan*. ✓ *day-* 'burn': Skr. *du-dāv-a* (gramm.), Gr. *δέ-δη(F)-ε* (*η* = pr. Gr. *α*) *δε-δαν-μένο-c*. Skr. *śad-* Gr. *καδ-* 'to distinguish oneself': Skr. *śa-śad-ūr* mid. 1<sup>st</sup> pl. *śa-śad-mahē*, Gr. *κε-καδ-μένο-c* (Pindar), Hom. *κέκασσαι κεκάσμεθα*. ✓ *pāk- pāg-* 'make firm': Gr. Dor. *πέ-παγ-ε*, Lat. *pe-pig-i* for *\*pe-pag-i*. ✓ *plag- plaq-* 'strike': Gr. Dor. *πέ-πλαγ-ε*, Goth. *fat-flōk*. Skr. *ja-hlad-ē* (gramm.) from *hlād-* 'to refresh, give life to', Gr. Dor. *κέ-χλαδ-ε* 'swells, becomes luxuriant'.

Skr. *an-āśa* 'he desired', *an-aś-ma an-aś-ūr an-aś-ē*, opt. *an-aś-yā-t*, O.Ir. *t-ān-aic* 'he came' 1<sup>st</sup> sing. *t-ān-ac* (-c = -nc-, I § 212 p. 178, § 513 p. 375), cp. aor. Gr. *ἐν-εγκ-ειν*, § 470 p. 15. Variant Skr. *anāś-a* Gr. *κατήνοχα κατενήνοχα* (cp. *ποδ-ηνεχ-ής* 'reaching to the feet'). On Skr. *aś-a* see § 851; on Gr. *ἐν-ήνοχ-ε ἐν-ήνεγκ-ται*, § 858.

§ 847. Perfect forms from Extended Roots.

Root + suffix *-ā-*, *-ē-*, *-ō-* (§§ 578 ff. pp. 118 ff.). Skr. *ji-jyāu*, Gr. Ion. *βε-βίη-ται* (*βε-βίηκε*) from *\*g(i)j-ā-*, ✓ *gei-* 'compel, subdue'. Skr. *ma-mnāu* (gramm.), Gr. Dor. *μέ-μνā-ται* from *mn-ā*. ✓ *men-* 'think, mean'. Skr. *ja-glāu*, Gr. *βέ-βλη-ται* (*βέ-βληκε*) from *gl-ē*. ✓ *gel-* 'fall' (cp. § 587 p. 127). Skr. *va-vāu*,

Goth. *vat-vō* from *u-ē* ✓ *au-* 'blow'. Skr. *ja-jñāu*, Gr. *ἐ-γνων-σ-ται* with *σ* added later (*ἐ-γνωνε*), O.Ir. *ad-gēn* (§ 877) from *gn-ō* ✓ *gen-* 'know'. On the Sanskrit conjugation of these perfects, see § 850.

Root + *s*-suffix (§§ 655 ff. pp. 189 ff.). *ten-s-* 'pull, draw': Skr. 3<sup>rd</sup> pl. mid. *ta-tas-rē* (Goth. *at-þans -þuns-un*). *tuei-s-* 'shake': Skr. *ti-tviṣ-ē*, Gr. *σέ-σσις-ται*.

Root + *dh*-suffix (§§ 688 ff. pp. 218 ff.). *rē-dh-*: Skr. *ra-rādh-a ra-rādh-ūr* (pres. *rādh-nō-ti* 'finishes successfully, makes all right'), Goth. *ga-rairōþ -rairōdun* (pres. *ga-rēda* 'I consider, busy myself').

In the same way, the present *sk*-suffix is seen in Skr. *pa-prach-a pa-prach-ur* and Lat. *po posc-ī* for \**poporcscī* from ✓ *prek-* 'ask'; beside these we have Umbr. *pepurkurent* 'rogaverint'. Mid.Ir. mid. *im-chom-arc-air*, Goth. *frak* (§ 670 p. 203). Probably perfect forms with *sk* are not so old as the parent language.

#### § 848. (B) Unreduplicated Perfect.

(1) First comes a group in which the vowel gradation was the same as in the Reduplicated Perfect. No perfect of this kind can now be recognised in particular forms of Italic, Celtic, or Balto-Slavonic; and in Germanic, only with those roots which do not belong to the *e*-series.

Skr. *vēd-a vid-mā* Avest. Gath. *vaēd-ā*, Gr. *οἶδ-ε ἴδ-μεν* from ✓ *ueid-* 'know'.<sup>1)</sup> Skr. *iś-ē* (and *iś-ē*) Avest. *is-ē* 'has got something into one's power, has power over', Goth. *áiþ* 'has' pl. *áiþ-un* (cp. § 888). Skr. *sarpa* 'he crept' (*upa-sarpa*) beside *sa-sarpa*, *viś-i-vās-* beside *vi-vēś-a vi-viś-ē* from *viś-* 'to enter', *ni-śidhur* beside *ni-śiśēdha* 'he warded off, forbade' -*śiśidhur*. Gr. Lesb. Ion. *οἶx-ε* 'is like' *οἶx-α-μεν* beside *οἶx-ε* for \**Fε-Foux-ε*, Hom. *ἀμφι-(F)αχvῖα* beside *λάxω* 'I cry out' for \**Fι-Faxω* (§ 552 p. 107).

1) Skr. *vivēda* 'he found out' does not ask for consideration here, although it comes from the same root. It probably first arose when the root had become differentiated into two — *vid-* 'know' and *vid-* 'find' (pres. *vindā-ti vittē*).

(2) Next these I place a number of forms which perhaps had *e* for the root vowel in the parent language itself. (Gr. Hom. ἔρχ-αται ἔρχ-ατο from (F)έρω 'I shut up, shut off'.<sup>1</sup>) (Gort. κατα-φελμένο-ς 'collected'<sup>2</sup>) from \*Fελ-νω Lesb. ἀπ-έλλω etc., see § 611 p. 150; parallel reduplicated stem Hom. ἐέλυεθα, Pind. plpf. ἐόλει. ἐπλ-τενυται ἐν ἐπιτυχίᾳ ἐστί (Ms. ἔστω) Hesych. beside ἐπι-τενυχάνω; but redupl. τέ-τευχ-ε. Hom. δέχ-αται from δέχομαι 'I receive'; but redupl. δε-δεκ-ται. Compare further Curtius, Verb II<sup>2</sup> 163 ff.; G. Meyer, Gr. Gr.<sup>2</sup> pp. 480 f. Skr. *yam-ur yam-átur* beside *ya-yām-a yēm-úr* from *yam-* 'cohibere'. *darś-i-vas-* beside *da-dārś-a da-dṛś-úr da-dṛś-i-vas-* from *darś-* 'to see'. *ōk-i-vās-* beside *u-uōc-a ūc-úr* from *uc-* (✓ευq-) 'to take pleasure in'. *skambh-ur skambh-áthur* beside *ca-skambh-a ca-skabh-áná-s* from *skambh-* 'to support'. *śas-ur śas-irē* beside *śa-śas-a śa-śas-ur* (instead of \*śa-śas-ur) from *śas-* (*kens-*) 'to prophesy, praise'. *takṣ-ur takṣ-atur* beside *ta-tákṣ-a ta-takṣ-úr* from *takṣ-* 'to fashion'. *sah-vás-* (Rig-V., Pada text) beside *sā-sāh-a sēh-i-ma sa-sah-ē* from *sah-* 'to subdue' (cp. *sah-vás-* under 3). In forms like *darś-i-vas-*, the strong grade in the root may be explained as due to the analogy of the sing. indic. active, as in reduplicated forms like *śa-śas-ur*. But an argument for the formation of the whole group from a stem which is not really perfect to begin with is found in the partic. *vi-jān-úṣ-as* Rig-V. x 271, which must be derived from *jñā-* 'to know' and was modelled upon the present *jānā-ti* (§ 598 p. 141 f.), and in the perfects belonging to reduplicated present stems, such as *śīd-atur* (from *śīd-a-ti*), *vivak-vás-* (from *vi-vak-ti*), *didās-i-tha* (from *dī-dāsa-ti*), *nōnāv-a* (from *nō-nav-i-ti*), see § 850; compare *viś-i-vás-*, cited under (1), beside pres. *viś-á-ti* and *dhi-ṣē dhirē* beside aor. *ī-dhi-ta*, also Gr. ἄγ-ναι 'way, road' (sc. ὁδός) beside ἡχα ἡχμαι and pres. ἄγω.

1) Whether ἔρχατο is augmented or reduplicated is doubtful.

2) Wrongly read -Fηλέ-νος by Baunack.

Remark 1. Skr. *sa-sah-ē* (beside *sēh-*) may have been formed from the stem seen in *sah-vās-*, just as *sa-sāh-ē* was from that of *sāh-vās-* (see below). Again, there is no need to ascribe the re-formation *śa-śās-ur* instead of *\*śa-śās-ur* to the influence of the singular alone (*śa-śās-a*), cp. § 852. For Greek, too, we should have one more point in favour of the explanation of the secondary vocalism of the root in forms like *ī-ēl-uai* (instead of *\*fē-fūl-uai*), cp. § 859.

(3) Forms with *ē* in the root-syllable, from roots of the *e*-series ending in a single consonant; the connexion with present stems having similar vocalism is obvious (§ 480 Rem. p. 28 f., § 494 p. 28). O.Ir. mid. *ro mīd-ar* 'iudicavi', Goth. pl. *mēt-un* opt. 1<sup>st</sup> pl. *mēt-ei-ma* from *✓med-* 'measure', cp. Gr. pres. *μῆδ-ε-ται*. Goth. pl. *sēt-un*, Lith. partic. *sėd-ęs* from *✓sed-* 'sit' (cp. § 494 p. 54, § 859 on Gr. *ἵσ-ται*, whose initial is perhaps to be explained by supposing that *\*sēd-* was represented in (Greek), cp. Lith. pres. *sėd-mi*. Skr. *sah-vās-* from *✓segh-* 'to subdue', cp. *sāk-śva sāk-a-ti sādḥá-s* (= *\*sēgh + tō*); *dāś-vās- dāś-i-vās-* from *✓dek-* 'honour, prize' (*daśas-yá-ti* Lat. *dec-us*), cp. *dāś-ti* Gr. *δῆκ-νύμετο*; *δῆκ-αράναι* (§ 621 p. 158, § 639 p. 178); I regard *sa-sā-hē da-daś-i-ma* as new forms in place of *\*sah-ē \*daś-i-ma*.

Since Latin *sēd-* in *sēd-ī sēd-i-mus* can be regularly derived from *\*se-zd-* (cp. *sīdō* for *\*si-zd-ō* I § 594 p. 450), it is reasonable to assume that *lēg-ī vēr-ī* are simply cast in the same mould by analogy: just as in Sanskrit *pēt-úr sēc-ē* and others must really be looked upon as coined on the analogy of *sēd- yēm-* (§ 852). On the other hand, *sēd-ī* can also be connected with Goth. *sēt-un* Lith. *sėd-ęs*, and *vēr-ī* with Goth. *qēm-un*; and this theory has the advantage that it becomes unnecessary to suppose that all *ē*-perfect forms from roots of the *e*-series with initial consonant are due to the analogy of the single form *sēd-ī*.<sup>1)</sup> However compare § 841 Rem., p. 378.

1) After what has been said on Umbr. *ander-sistu* in § 553 p. 107, the question would be at once decided if one such *ē*-perfect could be found in Umbrian or Samnitic. For Umbr.-Osc. *sēd-* is probably not derived from *sezil-*.

Furthermore, Idg. perfect forms of roots beginning with *e* and ending in a single consonant may also be brought under this *ē*-type. Gr. *ἐδ-ηδ-ιός* instead of \**ἦδ-ως* (§ 858), Lat. *ēd-ī ēd-i-mus*, Goth. *fr-ēt -ēt-un*, Lith. *ēd-ēs* O.C.Sl. *ēd-ŭ jad-ŭ*, Skr. *ād-a ād-ur* from *✓ed-* 'eat'. Gr. 2<sup>nd</sup> sing. *ἦσ-θα* (came to be used for the imperf., see § 858), Skr. *ās-a ās-úr* from *✓es-* 'be'. Lith. *ėj-ēs* fem. *ėj-us-i* from *✓ei-* 'go'. That *ē* is due to a contraction of *e-e* cannot be made probable.

(4) Roots with initial *a*-vowel, and ending in a single consonant, seen to have made this perfect in all forms with *a* in the parent language: \**aġ-e* 'egit' from *✓aġ-*: Skr. *aj-a* (gramm.), Gr. *ἦχ-ε ἦγ-μαι* (*η* for *α*), O.Icel. *ök* 3<sup>rd</sup> pl. *ök-o -u*; \**an-e* from *✓an-* 'breathe': Skr. *ān-a* Goth. *ōn ōn-un*; Goth. *ōg* 'I fear' beside *agis* Gr. *ἄχος* (Lat. *ēg-ī co-ēpī* — Skr. *āp-a āp-úr-* — are Italic re-formates as much as *cēpī*, see § 870). Similarly with *ō-* the perf. \**ōd-e* from *✓od-* 'smell': Gr. *ὄδ-ι-οδ-ε* instead of \**ὠδ-ε* (§ 858), Lith. *ū'd-ēs*. *aġ- ōd-* from *aġ- od-* seem to be formed on the same principle as *ēd-* from *ed-*; and if there is no reduplication in *ēd-*, there was none in *aġ-* or *ōd-*. Then again, some forms which never had reduplication are no doubt to be found amongst the perfects of Germanic and Latin from roots with initial Consonant, as Goth. *skōf skōb-un* Lat. *scāb-ī scāb-i-mus* (*skōb-un* : *sēt-un* = *ōn-un* : *fr-ēt-un*).

Remark 2. In II § 136 p. 438 I have offered a conjecture on the origin of the originally unreduplicated perfect; namely, that the participle with the suffix *-ues-* never had any reduplication. When these *ues-* participles became associated with the Perfect system in the parent language, two results followed: (1) either the participle itself was reduplicated, or (2) the finite verb with which it went sometimes lost its own reduplication. That the perfect participle once stood independent of the reduplicated perfect type, such as Gr. *γέ-γον-α γέ-γον-μεν*, can be argued on the strength of the root-vocalism in Gr. *εἰδώς* *ἑρηνυσία* beside *οἶδε* *ἑρηνυε* etc. (II p. 439).<sup>1)</sup> Sanskrit shows *āh-* and *dāṣ-* as perfect stems only in *āh-vās-* and *dāṣ-vās-*. Again, it may be mentioned that in Balto-Slavonic, which only shows participles of the above type with the sole exception of indic. Slav.

1) The Conjunctive with similar root-vocalism (*εἰδ-ο-μεν* Skr. *ta-īdn-a-t*, § 843 p. 384), also did not belong originally to the proper perfect forms, being thematic.

*sēd-ē*, all these are unreduplicated; and they include the large group exemplified by Lith. *sēd-ēs vės-ēs* O.C.Sl. *vez-ū*. Lastly, it must be added that it is easy to explain the wide diffusion by analogy of stems like *sēd-* and *skāp-* in roots with initial consonant, displacing the older reduplicated forms, by supposing that they were taken up in order to get rid of a number of awkward and unnatural sound-groups which had developed amongst the weak forms in (plural and dual indic., etc.).'

### Aryan.

§ 849. We begin with a few additional examples (cp. §§ 846—848).

✓ *ger-* 'make': Skr. *ca-kār-a ca-kṛ-mā ca-kṛ-ur* mid. *ca-kṛ-é ca-kṛ-ṣṣé* opt. (prec.) *ca-kṛ-iyā-s* part. *ca-kṛ-vās- ca-kṛ-úṣ-*, Avest. 3<sup>rd</sup> pl. act. *ca-xr-ar'*, O.Pers. 3<sup>rd</sup> sing. opt. *ca-xr-iyā*.  
 ✓ *dher-* 'hold fast': Skr. *da-dhār-a da-dhār-a da-dhr-ē*, Avest. *da-dār-a da-dr-ē*.  
 ✓ *yen-* 'win': Skr. *vā-vān-a va-van-mā* (cp. *han-mas* § 498 p. 58) *va-vn-é* conj. *vā-vān-a-s* part. *va-van-vās-*, Avest. Gath. *vaon-ar'* opt. *vaon-yā-ḥ* part. *va-van-vā vaon-uṣ-*.  
 ✓ *ej-* 'go': Skr. *iy-āy-a iy-ē-tha iy-úr*.  
 ✓ *bhāj-* 'fear': Skr. *bi-bhāy-a bi-bhy-ur* part. *bi-bhī-vās- bi-bhy-úṣ-*, Avest. part. *bi-wi-vā*.  
 ✓ *kley-* 'hear': Avest. *su-sru-ma su-sruyē* i. e. *su-sruv-ē* (Bartholomae, Handb. § 90 p. 40), Skr. *śu-śrāv-a* etc., see § 846 p. 388.  
 ✓ *tey-* 'be strong': Skr. *tū-tāv-a*, Avest. *tū-tav-a* 3<sup>rd</sup> sing. opt. (prec.) *tū-tu-yā*.  
 Ar. *sarž-* 'to let go': Skr. *sa-sarj-a sa-sṛj-é sa-sṛj-māhē* part. mid. *sa-sṛj-ānu-s*, Avest. part. mid. *haṣher'z-āna-*.  
 Skr. *vardh-* 'to grow': *va-vārdh-a vā-vṛdh-úr vā-vṛdh-é*.  
 Skr. *kṣip-* 'to throw': *ci-kṣēp-a ci-kṣip-ur*.  
 Skr. *vyadh-* 'to pierce': *vi-vyādh-a vi-vidh-ur vi-vyadh-ur vi-vidh-vās-*.  
 ✓ *leyq-* 'shine': Skr. *ru-rōc-a ru-ruc-úr ru-ruk-vās-*.  
 Avest. *rud-* 'to grow' (Skr. *rudh-*): 1<sup>st</sup> sing. *\*rū-raod-a* part. *\*rū-ruđ-uṣ-*.  
 Skr. *yam-* 'cohibere': *ya-yām-a ya-yan-tha yēm-i-mā yēm-úr yēm-ē*; *yēm-* for *\*iā-īm-*.  
 ✓ *iāg-* 'offer': Skr. *i-yāj-a yēj-é* and *tj-ē*; *yēj-* for *\*iā-īj-*.  
 ✓ *ueq-* 'speak' (pr. Ar. weak stem *\*ua-yk- ua-uc-*): Skr. *va-vāc-a* and *u-vāc-a u-vak-tha āc-úr āc-é*, Avest. 3<sup>rd</sup> sing. *va-vac-a* Gath. *vaoc'-mā* mid. 3<sup>rd</sup> sing. *vaoc-ē* part. *vaok-uṣ-*.

✓ *uegh-* 'vehere' (pr. Ar. weak stem \**ua-užh-*): Skr. *va-rāh-a* and *u-vāh-a ūh-úr ūh-ē*, Avest. 3<sup>rd</sup> pl. mid. injunct. (used as plpf.) *vaoz-i-rem*. ✓ *teq-* 'run, fall headlong': Skr. *ta-tāk-a* (gramm.), Avest. part. *ta-ḥk-uš-*: cp. O.Ir. *ro tāich* 'fugit' pl. *ro tāch-atur*. ✓ *sed-* 'sit'. Skr. *sa-sād-a sa-sāt-tha sēd-i-ma sēd-úr* (*sēd-* for \**sa-zd-*, I § 591 p. 447). Avest. opt. *ha-zd-yā-ḥ*. ✓ *seq-* 'be with, follow': Skr. *sa-śc-i-ma sa-śc-ur*. ✓ *dhē-* 'place' *dō-* 'give': Avest. 3<sup>rd</sup> sing. *da-ḍa* Gath. *da-da-pa* mid. *daiḍē*, Skr. *da-dhāu da-dāu* etc., see § 846 p. 390.

✓ *es-* 'be': Skr. *ās-a ās-úr*, Avest. *āh-a āh-ur*<sup>1</sup>: cp. Gr. *ἴσ-θα*, § 848 p. 394.

§ 850. Perfect Forms derived from an Extended Root, or from a Present Stem with some characteristic attacht (Suffix or Determinative). Compare § 847.

From Roots + *-a-*, *-ē-* or *-ō-*, only in Sanskrit. These Skr. perfects, of which *ji-jyāu ma-mnāu ja-glāu va-vāu ja-jñāu* are represented in the European languages (see *loc. cit.*), have the *a* only in the strong stem; being in this unlike the Present, where *a* runs through all the persons (e. g. *dr-a-ti dr-ā-nti* §§ 578 ff. pp. 118 ff.). The reason why in their weak forms they followed Perfects with root gradation was that so many of the perfect endings began in a sonant. As we have *ja-jñ-ē* (beside *ja-jñāu*), *ya-y-ā ya-y-ur* (beside *ya-yāu ya-yā-tha*, *y-a-* 'to go'), *da-dr-ur* (*dr-a-* 'to run'), *ta-tr-ē* (*tr-a-* 'to protect'), so also *ja-jñ-i-vās-* instead of \**ja-jñā-vās-*, *ya-y-i-vās-* instead of \**ya-yā-vās-*, *pa-pr-vās-* instead of \**pa-prā-vās-* (beside *pa-prā pa-prāu pa-prā-tha*, *pr-ā-* 'to fill'). *ja-jñivās-* and *papr-vās-* belonged properly to the Indicatives \**ja-jān-a* and *pa-pār-a* (gramm.); and it is possible that there has been contamination of the extended root (*ḡn-ē ḡn-ō-*, *pl-ē-*) and the unextended (*ḡen-*, *pel-*);<sup>1</sup> compare Gr. *τέ-τλα-μιν* and

1) Parallel to *paprāu*: *papāra* we have *papyē* (pres. *pyā-ya-tē*) and *pīpāya* (pres. *pāy-a-tē*); so that it is naturally doubtful with which of the two perfects Ved. *pipyē* is to be connected. The *i* in the reduplicator decides nothing, cp. *ji-jyāu*.

τε-τλ-η-ώς τέ-τλ-η-κα), πίμ-πλα-μεν and πίμ-πλ-η-μι (§ 594 p. 135. However, *yayivás-* at any rate is a new form, following some such analogy as *ta-sthi-vás-*.

Root + Nasal Infix or Nasal Suffixes (§§ 596 ff. pp. 136 ff.). Skr. *ta-stámbh-a ta-stabh-úr* (*stabh-* = *\*stmbh-*) and *ta-stambh-ur* (§ 852) conj. *ta-stámbh-a-t* beside *stambh-a-tē* 'makes itself firm, supports itself' from *✓stebh-*, *sa-saṅj-a* from *✓seg-* 'hang, affix', *da-dámbh-a* beside *da-dábh-a* from *dabh-* 'to hurt, deceive', see § 629 p. 167. *ju-ghūrṇ-a* beside *ghūrṇ-a-ti* 'wavers'. *ji-jinv-a* beside *ji-nva-ti* 'sets in motion, helps on', *pi-pinv-a* beside *pi-nva-ti* 'swells, makes fat'.

Root + *s*-suffix. Skr. *ta-ta-s-ré ti-tvi-ṣ-é* see § 847 p. 391. Ar. *dui-ṣ-* 'to hate' (§ 656 p. 190): Skr. *di-dvṣ-a di-dviṣ-ē* (gramm.), Avest. *dī-dvaēṣ-a di-dviṣ-ma*. Skr. *ba-bhāṣ-a* (gramm.) beside *bhāṣati* 'barks' for Idg. *\*bhel-se-ti* (the *ā* betrays this as a later re-formate): cp. O.H.G. *bal(l) ballun* (§ 657 p. 191). *da-dakṣ-ē* beside *dák-ṣa-tē* 'is able, is of value, is brave' (§ 659 p. 194). *mi-mikṣ-é* from *✓meik-* 'mix' (§ 669 p. 200).

With *sk*-suffix. Skr. *pa-prach-a* see p. 391. *mu-murch-a* beside *murcha-ti* 'curdles, congeals'. *ju-hurch-a* (gramm.) beside *hurcha-ti* 'slips, falls'. Compare too the thematic *an-archa-t* beside *ṛ-chá-ti ar-cha-ti* 'hits, attains', like *an-arṣ-a-t* § 854.

With *t*-suffix (§§ 679 ff. pp. 211 ff.). Skr. *ci-t-* 'to notice, recognise' (§ 680 p. 212): Skr. *ci-két-a ci-kit-ur ci-kit-ē ci-kit-vás-*, Avest. 3<sup>rd</sup> pl. Gath. *ci-koit-er-ṣ* (cp. § 852) part. *ci-kiṭ-wā*. Skr. *yu-t-* 'to join on to, strive' (§ 681 p. 213), weak stem *\*ia-īt-*: Skr. *yēt-ē*, Avest. *ya-yat-u yaēp-ma* (Gath. *yōṭp-<sup>o</sup>ma*) part. *yaēt-uṣ-*. Skr. *na-nart-a na-nyt-ur* beside *nyt-t-ya-ti* 'dances'. *pu-sphōt-a* beside *sphuṭa-ti* 'bursts, splits' (beside *phāl-a-ti*, § 680 p. 211). *ci-cēṣt-a* beside *cēṣ-ṭa-ti* 'is in motion'.

With *dh*-suffix. Skr. *ra-rádḥ-a* see p. 391. *yu-yōdh-a* *yu-yudh-é* beside *yō-dha-ti* 'gets in motion' (§ 689 p. 219).

Skr. *ji-jī-va ji-jīv-ē* beside *jī-va-ti* 'lives' (§ 487 p. 41).



From a reduplicated Present is often formed a Perfect having no further reduplication besides what the present had. *sīd-atur* (beside *sa-sād-a sēd-úr*) from *sīd-a-ti* Idg. \**si-zd-e-ti* from ✓ *sed-* 'sit', *nind-i-ma* from *nī-nd-a-ti* 'abuses, reviles', see § 550 p. 106. *vivak-vās-* from *vī-vak-ti* 'speaks'. *didās-i-tha* from *dī-dāsa-ti* desid. of *dā-dā-ti* 'gives'. *nōnāv-a nōnuv-ur* from *nō-nav-i-ti nō-nu-mas* intens. of *nāu-ti* 'praises', *davidhāv-a* beside part. *dāvi-dhv-at-* intens. of *dhū-nō-ti* 'shakes'.<sup>1)</sup> We may also if we choose place here *jāgār-a* (cp. Gr. ἐγρή-γερ-μαι) beside *jā-gar-ti* 'wakes, watches', since the present may be regarded as an intensive (§ 560 p. 109). *a* instead of *ā* in the reduplicating syllable is found elsewhere in Aryan too; and we have noticed in § 472 p. 17 that the spread of this *ā* in the reduplication is certainly not unconnected with the similarity in meaning of the Perfect-present and the Intensive. In later times another perfect *ja-jāgār-a* was made from *jāgar-ti*. That a perfect *bi-bhikṣ-ē* was formed for *bhikṣa-tē* (desid. of *bhāj-a-ti* 'divides, distributes, assigns', § 667 p. 200), and for *sajja-tē* 'hangs on to' (for \**saz-j-a-*, § 562 p. 110) a perfect *sa-sajj-ur* Mahabh. (beside *sa-saj-ur sēj-ur* and *sa-sañj-a* p. 397), is not surprising in view of the complete obscuration of the reduplication in the present.

As regards the above named perfects without special perfect reduplication, compare § 848 p. 392.

Lastly, two more Skr. perfects shall be cited, which have arisen from a root which has been completely fused into unity with a prefix. *pi-pīḍ-ē* beside *pīḍ-aya-ti* 'presses' for \**pi-zd-* (lit. 'to sit upon'), see § 795 p. 331; cp. Gr. *πενίεσται* from *πν-έζω*. *ni-niyōj-a* (Ait. Brāhm.) from *ni-yuj-* 'to fasten on'. So Gr. *ἡμφίεσται* from *ἄμφι-(f)εσ-* 'to clothe, draw on'. The same principle is exemplified in the Augment, see § 477 p. 25.

1) We should expect *davidhāv-a* by § 467 p. 13. The *i* seems to me to be more simply explained by supposing that the perfect is a comparatively late analogical form from *dāvidhv-* than by adopting Wackernagel's conjecture, *Dehnungsgesetz der gr. Compp.* p. 18.

§ 851. The syllable of reduplication had originally *a* = Idg. *e* with Roots beginning in a Consonant; the variant *a* = Idg. *ē* is also found (cp. § 850, p. 398).

This was changed in Aryan where a root had *i-* or *u-*vocalism.

(1) Of Roots with internal or final *i-* or *u-*vowel only three retained the *a* in the reduplicator: Skr. *ba-bhāv-a* Avest. *ba-vav-a*, Skr. *sa-sūv-a* (beside *su-śāv-a*), part. mid. *śa-śay-and-s* (beside indic. *śi-śy-ē*). In all others, *i* and *u* had taken the place of *a* in proethnic Aryan; as Skr. *di-dvṛṣ-a* *di-dviṣ-ē* Avest. *dī-dvaṛṣ-a* *di-dviṣ-ma*, Skr. *vi-vyadh-a* *vi-vidh-ur*, Skr. *ru-rōc-a* *ru-ruc-úr* Avest. *\*rū-raod-a* *\*rū-rud-uš-*, Skr. *su-ṣvāp-a* *su-ṣup-úr*. This tendency affected even roots with initial diphthong: hence Skr. *iy-āy-a* *īy-úr* i. e. *\*i-iy-ur* instead of pr. Ar. 3<sup>rd</sup> sing. *\*ai-a* 3<sup>rd</sup> pl. *\*ai-yr* (cp. Lith. part. fem. *ėj-us-i*) beside *ē-ti* 'goes'; Skr. *ūv-ur* i. e. *\*u-uv-ur* beside *u-tās* 'woven' *ō-tu-m*; Skr. *u-vōc-a* *ūc-úr* beside *uc-ya-ti* 'takes pleasure in' *ōkas-* 'pleasure, satisfaction' (cp. the archaic adjectival participle without reduplication *ōk-i-vās-* § 848 p. 392).

One important factor in this developement we may conjecture to have been the influence of reduplicated presents with *i* and *u* in the reduplicator. If the stems of Skr. *dī-dhay-a* *dī-dhi-ma*, *dī-dāy-a* *dī-di-vās-*, *pī-pē-tha* *pī-pi-vās-*, *bī-bhay-a* are really and truly the same which are contained in the present forms *dī-dhy-ē* *ā-dī-dhē-t*, *dī-dy-ati* *dī-di-hī* *ā-dī-dē-t*, *pī-pi-hī* *pī-páy-a-t*, *bī-bhay-a-t* (§ 537 pp. 97 f.) — compare *jā-gār-a* : *jā-gar-ti*, *nō-nāv-a* : *nō-nav-i-ti* § 850 p. 398. — then we shall have to connect e. g. *bi-bhay-a* *bi-bhy-ur*, *iy-āy-a* *īy-úr*, *ju-hāv-a* *ju-huv-ur* *ju-hv-ē* directly with *bi-bhē-ti* *bī-bhy-ati*, *iy-ē-ti* (§ 537 p. 97), *ju-hō-ti* *jū-hv-ati*. Beginning then with perfects like these, the reduplication with *i* and *u* could easily spread to other perfects from *i-* and *u-*roots to which there was no corresponding reduplicated present.

(2) Roots beginning with *i-* and *u-*, of the form of Ar. *īat-* 'join on, strive' and *yak- yac-* 'speak', still had *īa-* and *yā-* for reduplication right through the Perfect in proethnic Aryan: Skr. *yēt-ē* Avest. *ya-yat-a yaēp-ma*, Skr. *ya-yām-a yēm-ūr*, Skr. *yēj-ē*, Skr. *va-vāc-a* Avest. *va-vac-a vaox-mā*, Skr. *va-vāh-a* Avest. *vaoz-i-rem*, Skr. *va-vām-a*; with the weak stems compare pres. Skr. *yēṣa-ti* = *\*īa-īṣ-a-ti* and aor. *á-vōca-t* Avest. *vaoca-p* = *\*uā-uc-a-* § 562 p. 110. These forms stood on the same level as those like Skr. *va-vart-a va-vṛt-ur vi-vēṣ-a vi-viṣ-ūr* and with Gr. *ἰ-όλ-ε* (§ 848 p. 392) *ἰ-οργ-ε* (§ 846 p. 389) *ἰ-οικ-ε* (§ 848 p. 392) and Goth. *vai-vald*. Next, in Sanskrit, those verbs which had amongst their non-perfect forms some in which the root, being of the weak grade, began with *i-* or *u-*, substituted *i-* and *u-* for *yā-* and *vā-* as the reduplicator; and thus we get *i-yāj-a ij-ūr* (i. e. *\*i-ij-ur*) beside *ij-yā-te iṣ-tá-s* etc., *u-vāc-a ūc-ūr* (i. e. *\*u-uc-ur*) beside *uc-yá-tē uk-tá-s* etc., on the analogy of *iy-āy-a iy-ūr* beside *iy-ē i-tás* etc., *vi-vyādh-a vi-vidh-ur* beside *vidh-ya-ti viddha-s* etc., *su-ṣōḍp-a su-ṣup-ūr* beside *sup-ya-tē sup-tá-s* etc.<sup>1)</sup> On the other hand, *ya-yām-a yēm-ūr va-vas-ē* (from *vas-* 'to clothe'), and other such remained simply because none of their forms had such beginnings as *im-* or *uṣ-*. Only here and there did *u-* transgress these prescribed limits: as in *u-vām-a* (Satap.-Brāhm.) instead of *va-vām-a* from *vam-* 'vomere'.

With this Sanskrit development compare Lat. *sci-cit-ī* from *scindō* as contrasted with *ce-cid-ī* from *cadō*, § 868.

Remark. The reason why we have in Sanskrit *vaṛ-ūr* and not *\*vōr-ūr*, and *vān-ūṣ-* not *\*vōnūṣ-* (cp. Avest. *vaonuṣ-*), as might have been expected from *maghōn-*, the weak form of the stem *maghavan-* 'giver, offerer', was the analogical influence of forms whose ending began with a consonant, such as *va-vṛ-má* and *va-van-má va-van-vás-*, perhaps also that of bye-forms with a weak-grade root syllable which still remained

1) I hold accordingly that the favourite theory which sees pr. Idg. reduplications *i-* *u-* or *ī-* *ū-* in *i-yāj-a u-vāc-a* is incorrect. Observe further, that the evidence offered by *i-yāj-a ij-ē* and the like for the view that the *✓ yaj-* began in Idg. with *i-* and not with the spirant *j* is only indirect (I § 598 p. 453).

a syllable by itself (op. *ta-tan-ē* i. e. *\*-tān-ai* beside *ta-tn-ē*, *ti-stir-ē* i. e. *\*-stīr-ai*). Thus *va-vn-* in this way depended upon *va-van-*; and, by a contrary application of the principle, *yēm-i-mā yēm-i-vas-* instead of *\*ya-yan-ma \*ya-yan-vas-* (op. *ja-gan-ma ja-gan-vās-* from *gam-* 'to go') depended upon *yēm-ur yēm-uš-* (op. *jagm-i-vas-* instead of *jagan-vas-* following *jagm-uš-*).

Whilst Roots beginning with an *a*-vowel had in Aryan *a-* through all forms of the Perfect, if they ended in a single consonant, as Skr. *ās-a* Avest. *ānh-a* (§ 848 p. 394, § 949 p. 396), they have *ān-* (or *an-*) for the reduplicating syllable if the root ends in a double consonant. Of these forms, the following were inherited from the parent language: Skr. *ān-āś-a* with the weak stem *ān-aś-* (*-aś-* = *-āś-*) in *ānaś-ūr ānaś-yā-t* (pres. *aś-nō-ti* 'attains'): O.Ir. *t-ān-aic*, see § 846 p. 390; parallel Skr. *ānaś-a* Avest. Gath. plpf. *ēnāxšta* for *\*anāś-ta*, which are similar to Gr. *κατ-ήνοxa* (see *loc. cit.*), and Skr. *āś-a āś-atur*, which was formed for *aś-nō-ti* aor. *aś-yā-t aś-ē-ma* on the analogy of *ās-a ād-a*. Also *ān-añj-a ān-aj-ē* opt. Ved. *an-aj-yā-t* from *añj-* 'to anoint, smear' seems to have formed part of the parent stock.

Hence afterwards arose *ān-arc-a ān-rc-ūr* from *arc-* 'to shine, praise', *ān-ṛdh-ūr* from *ardh-* 'to thrive', *ān-ṛh-ūr* from *arh-* 'to earn'.

#### § 852. Form of the Root Syllable.

The pr. Aryan distinction between Skr. 1<sup>st</sup> sing. *ja-ján-a* with *ā*, and 3<sup>rd</sup> sing. *ja-jān-a* with *a* (§ 843 p. 384), was lost. Thus we have in later Sanskrit the 3<sup>rd</sup> sing. form used for the 1<sup>st</sup> as well as 3<sup>rd</sup> (still, *jajāna* was not dropt altogether), and in Avestic the 1<sup>st</sup> singular form was used for both (e. g. *va-vac-a* beside the regular *hi-šāy-a*).<sup>1)</sup>

In imitation of such forms as *sa-sād-a : sēd-ūr* (for *\*sa-zd-ur*) and *ya-yām-a : yēm-ūr* (for *\*īa-īm-ur*), arose the Skr. forms *sēh-ur* (*sah-* 'to subdue'), *sēj-ur* (*saj-* 'to hang, fasten'), *pēc-ūr* (*pac-* 'to cook'), *sēc-ē* (*sac-* 'to be with, accompany'), but also *sa-śc-ē*, *pēt-ūr* (*pat-* 'to fly, fall', but also

1) The Avestic change was natural enough because *tataša* (Skr. *tatāka*) had got in amongst roots with single final consonant.

*pa-pt-úr*), *nēm-ur* (*nam-* 'to bow, bend'), *tēn-ē* (*tan-* 'to stretch', but also *ta-tn-ē*). This type recommended itself because it avoided certain awkward sounds which had developed in some roots, as was the case in Germanic with the type *qēm-* (§ 893). *mēthur* beside *ma-mánth-a* (*manth-* 'to shake, knead'), and *bēdh-úr* beside *ba-bándh-a* (*bandh-* 'to bind'), arose because the weak roots *math-* and *badh-* in *mátha-ti badh-ná-ti* etc. (*-a* = *-y-*) were conceived as being parallel to roots like *sad-* or *yaj-*; which also explains *mamáth-a* beside *mamanth-a*, *mathišya-ti* beside *manthišya-ti* and the like. That a Perfect stem such as *sēd-* or *yēm-* was to the consciousness of the speaker nothing more than an ablaut-form of the unreduplicate root is shewn by forms with initial media aspirata like *bhēj-ur* (beside *ba-bhāj-a* from *bhaj-* 'to distribute'), and those which begin with a double consonant, as *trēs-ur* (beside *ta-trās-a* from *tras-* 'to tremble').

The strong singular stem seems often to have invaded forms proper to the weak stem. Skr. *tastambhur* (but also *tastabhúr*) following *tastámbha*, cp. § 850 p. 397. *babandhur* following *babándha*. *yuyōpimá* following *yuyōpa* from *yup-* 'to obstruct'. *vivēšur* (but also *vivišē*) following *vivēša* from *viš-* 'to enter'. *bibhēdur* (but *bibhidur* also) following *bibhēda* from *bhid-* 'to split'. *vavahatur* (but *ūhatur*) following *vavāha* from *vah-* 'vehere'. *nanāmirē* (but *nēm-ur*) following *nānāma*. *śāsās-ur* following *śāsāsa* (cp. aor. *á-śiṣ-a-t*) from *śas-* 'to order': cp. pres. 3<sup>rd</sup> pl. *śās-ati* beside opt. *śiṣ-ya-t*. *dadāvás-* (but *dadvás-dadivás-*) following *dadaú* from *da-* 'to give'. Avest. 3<sup>rd</sup> pl. *cikōiter's* (but *cikīpwā*) following *\*cikōita* from *cit-* 'to observe' (§ 850 p. 397). 2<sup>nd</sup> pl. *hanhana* following 3<sup>rd</sup> sing. *\*hanhana* from *han-* 'to give, earn'. But we may see, from what has been said in § 848 pp. 392 f. on *sa-sah-ē śa-śas-ur* and *sa-sah-ē da-daś-i-ma*, that it is possible to hold that the germ of these consists of unreduplicated forms with a strong root (such as Skr. *\*stambh-ur*) which received reduplication in Aryan.

In Skr. 1<sup>st</sup> and 3<sup>rd</sup> sing. *ta-sthāú da-dhaú pa-praú* etc., the origin of *-au* is obscure. Now and then we meet with variants

3<sup>rd</sup> sing. *pa-prā* and Avest. 3<sup>rd</sup> sing. *da-ḍa*.<sup>1)</sup> Some regard *-u* as a particle affixed to the perfect with final *-a*, as *pa-prā* + *u* = *pa-prāu*; and others compare *ta-sthāu* with *sthāv-ira-sthāv-arā-sthū-rā*, or *pa-prāu* with Lat. *plēv-i*, *ja-jñāu* with Lat. *nōv-i*. All these are thoroughly uncertain conjectures.

§ 853. As regards the *-i-* which precedes the personal ending in *-i-tha -i-ma -i-va -i-ṣē -i-mahē -i-vahē*, which is much commoner in the later language than it is in the Veda, the most essential facts have been pointed out in § 844, pages 385 f.

The same *i* is seen in the unreduplicated *iṣ-ē* (§ 848 p. 391): *iṣ-i-ṣē* (beside *iṣ-ṣē*) *iṣ-i-dhvē* like *ja-jñ-i-ṣē ja-jñ-i-dhvē*. After what was said in § 574 p. 115, it is not strange that beside *iṣ-ṣē* we find *iṣ-i-tē*. Compare however the pres. *ṣṛ-nv-i-ṣē* beside *ṣṛ-nv-i-rē* (like *iṣ-i-rē ja-jñ-i-rē*).

§ 854. The so-called Pluperfect, and Thematic Forms of the Perfect Stem (cp. § 555 p. 108, § 845 p. 387 f.).

Un-Thematic Pluperfect. Skr. 2<sup>nd</sup> and 3<sup>rd</sup> sing. *á-ja-gan* 3<sup>rd</sup> pl. *á-ja-gan-ta* (with strong stem like *gan-tá* beside *ga-tá*, § 498 p. 58) 3<sup>rd</sup> pl. mid. *á-ja-gm-iran* beside *ja-gám-a*. 1<sup>st</sup> sing. *ca-kar-am* beside *ca-kār-a*. Avest. 3<sup>rd</sup> pl. mid. *vaoz-irem* beside Skr. *va-vāh-a* (§ 849 p. 396). Gath. 2<sup>nd</sup> pl. mid. *vōiz-dūm* (with strong stem instead of weak) beside *vōista* = Skr. *vēttha*. Compare Gr. *ἐ-πέ-πιθ-μεν* beside *πέ-ποιθ-ε*, § 865. We find in Sanskrit also the 2<sup>nd</sup> and 3<sup>rd</sup> sing. with *-i-*, an *á-ja-grabh-i-t* beside 1<sup>st</sup> sing. *á-ja-grabh-am*, see § 577 p. 118.

Thematic Pluperfect. Skr. *á-ca-kr-a-t* beside *ca-kār-a*. *á-da-dṛh-a-nta* beside *da-darh-a* (gramm.) from *darh-* 'to make firm'. *an-arṣ-a-t* from *arṣ-* 'to stream'; an analogous form is *an-archa-t* (beside perf. *ār-a ar-ur*) from pres. *ṛ-chá-ti ar-cha-ti* 'hits, attains, seizes' (cp. § 850 p. 397). Avest. *ja-ym-a-p* beside Skr. *ja-gám-a*. *ta-taš-a-p* beside 1<sup>st</sup> sing. *ta-taš-a* =

1) On the assumed Avest. *dadō* = Skr. *dadhāu*, see Bartholomae, *Bess. Beitr.* ix 301.

Skr. *ta-tákš-a* from *takš-* 'to shape, form'. Compare Gr. *ἐ-μέ-μην-ο-ν* § 865.

The Thematic Imperative, as Skr. 2<sup>nd</sup> dual *mu-mōc-a-tam* 2<sup>nd</sup> pl. *mu-mōc-a-ta* (*muc-* 'to loose') 2<sup>nd</sup> sing. mid. *vā-vṛdh-ā-sva* (*vardh-* 'to grow'), stood beside the Unthematic *mu-muk-tam mu-mug-dhi*, as in Greek e. g. *κε-κράγ-ε-τε κε-χῆν-ε-τε* beside *κέ-κραγ-θι*; and they were related to the Thematic Conjunctive Skr. *mu-mōc-a-t(i)* Gr. *ἔθ-ο-μεν* as, in the *s*-aorist, Skr. 2<sup>nd</sup> sing. imper. *nē-ṣ-a* to the conj. *nē-ṣ-a-ti*, Gr. 2<sup>nd</sup> pl. imper. *ἄξ-ε-τε* to conj. (fut.) *ἄξ-ε-τε* (§ 833 p. 370).

The forms Skr. *tš-a-tē* Avest. *is-a-itē* beside *tš-ē is-ē* 'has brought into his power' doubtless first arose because the latter had ceased to be looked upon as belonging to the Perfect. Thus they are classed along with Presents like Skr. *han-a-ti* Avest. *janaiti* beside *hán-ti jainti* (§ 498 p. 58). Compare § 888 on Goth. *áihan áihands*.

#### Armenian.

§ 855. The old Perfect inflexion seems to be wholly lost. *gitem* 'I know' may have been transformed from *\*μοῖδ-a* in the same way as Lesb. *οἶδημι* from *οἶδα*; but it may also be regarded as a present of Class II *A* (§ 517 Rem. p. 82). For another even more uncertain trace of the Perfect in Armenian, see Meillet, *Mém. Soc. Ling.* vii 164.

#### Greek.

§ 856. We begin with a few examples in addition to those given in § 846.

*ἐ-σπαρ-ται* from *σπείρω* 'I sow'. *ἐ-ολ-ε ἐ-ελ-ται* from *εἰλω* 'I press' ✓ *φελ-* (§ 848 p. 392). *ἐ-στολ-ε* (gramm.) *ἐ-σταλ-ται* from *στέλλω* 'I place, ordain'. *δῆ-δρομ-ε* beside *ἐ-δραμ-ο-ν* 'I ran'. Hom. *δεῖδω* i. e. *\*δέδρω* 'I fear' for *\*δε-δφοκ-α*, *δεῖδια* i. e. *\*δέ-δφι-α*, *δεῖδιμεν* i. e. *\*δέ-δφι-μεν*, *δεῖδιότ-ες* i. e. *\*δέ-δφι-ότ-ες* (I § 166 p. 147), Att. *δέ-δι-μεν δέ-δι-θι δε-δι-ώς δι-δι-έναι*.

κρί-ται from κρίνω 'I separate, choose, decide' (§ 611 p. 150). πέ-πορδ-ε from πέρδομαι 'pedo'. πέ-φασ-ται from φράζω 'I give to understand, show', √ gherd-: Lith. part. *isz-gĩrd-ės* from *isz-girstù* 'I perceive' (§ 707 p. 236, § 686 pp. 216 f.). τέ-τροφ-ε τέ-τραφ-ε τέ-τραπ-ται from τρέπω 'I turn'. έ-ολπ-ε from έλπομαι 'I hope', *φελπ-*. πέ-πονθ-ε πεπαθ-ν̄α beside fut. πείσομαι for \*πενθ+σ-, pres. πάσχω 'I suffer' (§ 673 p. 205). έ-οικ-ε 'is like' έ-ικ-τον ή-ικ-το έ-οιγ-μεν έ-οικ-α-μεν εικ-ώς έ-οικ-ώς, √ *φεικ-*. πέ-ποιθ-ε έ-πέ-πιθ-μεν πε-ποίθ-α-μεν πέ-πεισται from πείθω 'I persuade'. τε-τευχ-ώς τέ-τυκ-ται τε-τεύχ-αται from τεύχω 'I prepare'. κέ-χοθ-ε from χέζω 'caco'. τέ-τοκ-ε beside έ-τεκ-ο-ν 'I begat, bore'. έ-ρρωγ-ε έ-ρρηγ-ε̄ω from ρήγ-ν̄υ-μι 'I break', *φρηγ-*. λέ-ληκ-ε λε-ληκ-ώς (-η- for -α-) λε-λακ-ν̄α beside έ-λακ-ο-ν 'I spoke'. με-μηκ-ώς (-η- for -α-) με-μακ-ν̄α beside μακών 'bleating, crying'. λέ-λαμπ-ε from λάμπω 'I shine'.

δέ-δε-ται from δί-δη-μι 'I bind'. The root-vowel *ι*, like that of τέ-θε-ται εί-ται (for \*έ-ε-ται) and that of δέ-δο-ται, is instead of *α* = Idg. *ə*. Compare § 493 p. 53 on έ-θε-μεν ι-δο-μεν, and § 542 p. 102 on τί-θε-μεν ι-ε-μεν δι-δέν-των δί-δο-μεν.

Forms with so-called Attic Reduplication. Hom. εἰλήλουθα εἰλήλουθμεν Att. ἐλήλυθα ἐληλύθαμεν beside ἐλεύσομαι 'I will come' aor. ἤλυθον, ἔλενθ-. Ion. ἄρ-ηρ-ε ἄρηρώς ἄρ-αρ-ν̄ια beside ἤρ-αρ-ο-ν 'I joined'.

§ 857. Numerous Perfect forms based upon Roots extended in some way, and upon Presents of all sorts and kinds. Compare § 847 pp. 391 f.

(1) δέ-δρα-ται from δρα-α- 'to do'. κέ-κρα-ται from κρ-α- 'to mix'. τε-τλη-ώς from τλ-α- 'to bear'. κε-κυη-ώς from κυ-α- 'to weary'. τέ-τμη-ται from τμ-α- 'to cut'. τέ-τρη-ται from τρ-η- 'to wear away, pierce'. κέ-κλη-ται from κλ-η- 'to call'. κέ-χρη-ται from χρ-η- 'to lend, borrow'. τε-τιη-ώς τε-τίη-ται from τιη- 'to be still, overawed' Idg. *gʷi-ē-*, see § 590 p. 132. κε-χαρη-ώς κε-χάρη-ται from χαίρω 'I rejoice'. κε-καφη-ώς 'breathing hard'. δε-δέη-ται from δέω Hom. Aeol. δεύ-ω 'I need'. νε-νέμη-ται



from νέμω 'I distribute'. βε-βούλη-ται from βούλομαι 'I wish' for \*βολνο-μαι. τε-τύπτη-ται from τύπ-τω 'I strike'. Compare § 750. 1 p. 271, § 756. 4 pp. 275 f., § 822. 5 p. 360.

(2) Along with these go Perfects from later denominatives, as Hom. κε-κοτη-ώς, Boeot. gen. pl. *φε-φύκονομειόντων* (Att. *ὠκονομηκόντων*, cp. § 866), τε-τίμη-ται (-η = -α-), πε-φίλη-ται, με-μίσθω-ται, κε-κόνι-ται, δε-δάκρυ-ται. Compare § 756. 5 p. 276, § 773 pp. 290 f., § 813 p. 351, § 822. 6 p. 360.

(3) δε-δίδαχ-ε δε-δίδακ-ται δε-δίδαγ-μαι beside δι-δάσκω 'I teach' (§ 678 p. 210), cp. aor. ἐ-δίδαξα.

(4) πέ-φην-ε (Dor. πέ-φᾶν-ε) πέ-φαν-ται from φαίνω 'I make appear, show' for \*φα-νκ-ω. κέ-χην-ε (Dor. κέ-χᾶν-ε) from χαίνω 'I gape' for \*χα-νκ-ω. ἔ-ξαν-ται ἔξαμμαι from ξαίνω 'I scratch, comb'. On the forms πέφασμαι ἔξασμαι (= ἔξαμμαι), see § 862. προ-βέβουλε beside βούλομαι (see under 1). Compare § 822. 2 p. 359.

(5) Nasal Infix. κέ-κλυγ-ε, also κέ-κληγ-ε, beside κλαγγάνω and κλάζω (for \*κλαγγ-ω) 'I make a sound, cry out'. The verb χανδάνω 'I have room for' (✓ghed-, § 631 p. 168) perhaps had both κέ-χανδ-ε and κέ-χονδ-ε (like λέλογχε from λαγχάνω) for its perfect; see Mekler, Beitr. zur Bildung des griech. Verbums, 60 f.; Wackernagel, Berl. Phil. Wochenschr. 1891, col. 1475 f. Aeol. part. πε-φύγγων (Att. πε-φρευγ-ώς) from φνγγάνω 'I flee'. ἔ-σφιγκ-ται 1<sup>st</sup> sing. ἔσφιγμαι (-γμ- for -σγμ-, I § 492 p. 363) from σφίγγω 'I tie'. Compare § 822. 3 p. 359.

(6) ἔ-σπα-σ-ται, κέ-κλα-σ-ται, κε-κέρασ-ται, ἐ-σκέδασ-ται; ἔ-σβ-εσ-ται, κε-κόρεσ-ται; ἔ-ξυ-σ-ται, εἴρυσ-ται. See § 661 p. 196 § 842 pp. 380 f.

(7) Syrac. πέποσχε instead of πέπονθε from πάσχω (§ 673 p. 205). Compare Skr. *papracha* Lat. *porosci* from ✓prek-.

(8) κατα-πέπυθα καταρρύηκα Hesych., beside πύθω 'I make to rot'. βέ-βριθ-ε from βριθ-ω 'I weigh down'. Compare § 694 p. 223. πέ-φλοιδ-ε beside ἔ-φλιδ-εν διέρρεεν. δια-κεχλιδώς and δια-κεχλιδώς beside χλῖω 'I am weakly'. 3<sup>rd</sup> pl. ἐ-ρράδ-αται from ράινω 'I sprinkle' for \*σρ-ανω (§ 621 p. 159). Compare § 695 p. 224.

(9) Hom. *πεφνζότες* from *\*φύζω* for *\*φνγ-ω* (§ 707 p. 236).

(10) Perfects of later Denominatives whose verbal stem ended in a Consonant. *κη-κήρῶ-ε κη-κήρῶ-ται κη-κήρῶγ-μαι* from *κηρῶσω* 'I announce, proclaim' for *\*κᾱρῶκ-ω*. *πε-φύλαχ-ε πε-φύλαχ-ται πε-φύλαχ-μαι* from *φυλάσσω* 'I watch' for *\*φυλακ-ω*. *ἤλπισται* from *ἐλπίζω* 'I hope' for *\*ἑλπιδ-ω*. *λέ-λησται* from *ληΐζομαι* 'I get booty' for *\*λαφιδ-ο-μαι*. *τε-τέλεσ-ται* from *τελέω* 'I finish' for *\*τελεσ-ω*. *ἡγγέλ-ται* from *ἀγγέλλω* 'I announce'. *λε-λόβαν-ται* from *λῶμαίνομαι* 'I treat shamefully, insult, torture'. Compare § 756. 3 p. 275, § 757 p. 276 f., § 768 p. 282 f., § 822. 4 p. 359 f.

§ 858. The Reduplication with *ε* in roots with initial consonant has been more faithfully kept in Greek than in any other language. The vitality of this type can be best seen in its use with denominative forms like *πε-φύλακται δε-δυστύχηκε*, *τε-θαλασσοκράτηκε*, Boeot. *τε-τεκονομειόντων*.

Remark. On the analogy of compounds like *εμ-πεποίηκε* were made others such as *εν-δεδήμηκε απο-δεδήμηκε* instead of *\*ενδημηκε \*ηποδημηκε* from *εν-δημο-ς απο-δημο-ς*. The group was further enlarged by *θεο-πεποίηκε ειδο-πεποιήται ιππο-τετρώφηκε* and many other like them.

On the treatment of the initial consonant or consonants of the reduplicator, see §§ 475 f. pp. 20 ff.

Verbs with initial vowel were treated in two ways, as in Sanskrit:

(1) By lengthening the initial vowel. 2<sup>nd</sup> sing. *ἦσ-θα* from *✓es-* 'to be' (cp. Skr. *ds-i-tha*), which form came afterwards to be used as imperfect because *ἦα ἦμεν ἦσθε ἦστων* belonged to both; *ἦρικε* from *ἐρίζω* 'I strive'. *ἦχ-ε ἦγ-μαι* (*η* = *α*) from *ἄγω* 'I lead': Skr. *aj-a* O.Icel. *ðk-* (here comes *ἄν-ωγ-ε* from *ἄν-άγω* according to Danielsson, Nord. tidskr. f. filol., ny række, vii 138 ff.); *ἦσκη-ται* from *ἀσκέω* 'I practice'; *ἦρχ-ε ἦρχ-μαι* from *ἄρχω* 'I begin'; *ἱμφίεσ-ται* from *ἀμφι-έσ-σαι* 'to draw on, clothe'. *ὄγκω-ται* from *ὀγκέω* 'I grow big, swell up'. This perfect formation has been treated in

§ 848 p. 393 f.; it is very doubtful whether it ever had any reduplication.

(2) By the "Attic Reduplication", which corresponds to the structure of Skr. *an-áś-a* (§ 851 p. 401). This flourished considerably at the expense of the last named (1). *ἐδ-ηδώς*: Skr. *ád-a*; *ᾔρ-ωρ-ε*: Skr. *ár-a*; *ᾔδ-ωδ-ε*: Lith. *ũ'd-žs*. Att. *ὀμ-ώμο-ται* (and *ὀμ-ώμο-σ-ται*) from *ὀμ-νῶ-μι* 'I swear'. Hesiod has *ἐρ-ήρισται* from *ἐρίζω* 'I strive'; but *ἤριξε* above. Perhaps Hom. *ἐρησθα* 'eras' and *ἐην ἤην*, as contrasted with *ἦσθε ἦεν ἦν* (§ 502 p. 65 f.), was based upon a form \**έσ-ησ-*; cp. § 583 p. 124, and the Author, Gr. Gr.<sup>2</sup> p. 164, Bartholomae, Stud. z. idg. Spr. II 118 f. Ion. *ἀν-αρ-αίρη-ται* and *ἀν-αιρ-έρη-ται* from *ἀν-αιρέω* 'I raise up on high'; but *ἀν-ήρη-ται*. Hom. *ὀρ-ωρέχ-αται* from *ὀρέγω* 'I stretch out', but *ὠρεγ-μαι*, from *✓reg-* (O.Ir. perf. *re-raig* 'porrexit'). On the analogy of *ἐλ-ήλυθ-ε*: *ἐλυθεῖν*, the form *ἐν-εγκ-εῖν* 'to bring', which already had the Attic reduplication (cp. Skr. *an-áś-a*), formed a perfect *ἐν-ήνεγκ-ται*, which next called into being the act. *ἐν-ήνοχε* beside *κατ-ήνοχε* (§ 846 p. 390); *ἐν-* in *ἐν-ήνεγκ-ται* and *ἐν-ήνοχε* must then be the preposition *ἐν*, which I see in the aorist *ἐν-εικα* (§ 504 p. 68); if so, *ἐν-ήνεγκ-ται* must be compared directly with Skr. *an-áś-a*. Ion. *ὀρ-ώρηκ-ε* (Herodas) beside *ἐόρᾳκε* *ἐώρᾳκε* from *ὀράω* 'I see' for \**φορᾶ-*, late Attic *ἐλ-ηλιγ-μμένο-ς* beside *εἴλικ-ται* from *ἐλίσσω* 'I wind' for \**ελικ-*.

§ 859. The original differences of root-gradation in the group of Perfect forms transmitted from the parent language were very largely wiped out by analogy.

First, the vowel-grade of the indic. active invaded other forms; as *γεγόν-α-μεν* *γεγον-ώς*, *ἐφθόρ-α-μεν* *ἐφθορ-ώς*, *πεπόνθ-α-μεν*, *τετρώφ-α-μεν*, *ἔοιγ-μεν* *εόικ-α-μεν*, *πεποίθ-α-μεν* conj. Hom. *πεποιθ-ο-μεν* Att. *πεποίθ-ω-μεν*, *εἰλήλουθ-μεν* *εἰληλουθ-ώς*, *ἐρρώγ-α-μεν*, *ύφ-έω-ται*.

Next, the weak form sometimes became the type; as *δέδι-α*, *τέτραφ-α*, *ἐλήλυθ-α*.

Thirdly, *ε* is often found where it originally was not, as

πέφενυ-ε πεφενύ-α-μεν, πέ-πλεχ-ι, λέ-λιγ-ι; particularly often in the Middle, as πέπλεχ-ται πέπεισ-ται. The original place of this ablaut-grade was in the perfect Conjunctive, sometimes in the Participle active (II § 136 p. 438 f.), and also, according to the hypothesis of De Saussure and Osthoff, the 1<sup>st</sup> sing. Indic. active (§ 843 Rem. p. 384). Again, ἐ-ιλ-ται and like forms may be based upon the unreduplicated (κατα-)φελμένο-ς; see § 848. 2 with Rem. 1, pages 392 and 393. Lastly, non-perfect verbal forms with ε may have had a hand in it; thus φεύγω may have influenced πέφενυι, or πείθομαι πέπισται.

Sometimes the change which took place was that weak perfect forms with α from roots of the *e*-series caused the production of other forms on the analogy of α-roots. Thus μέμηλε (Dor. μέμᾱλε) took the place of \*μέμολε (from μέλει 'it is a care to'), because forms with με-μαλ- (cp. Skr. *tī-stir-* from *√ster-* 'sternere') were associated with such others as τι-θαλ-νῖα beside τέθηλε (Dor. τέθᾱλε). Similar considerations account for μέμηνι (*√μεν-* 'think') and διεδηχώς δέδηγμαι (*√denk-* 'bite') by analogy with με-μαν- = \**me-mṇn-* and δι-δουκ- = \**de-dḡk-* (cp. Skr. *dadaś-vās-* beside *dadaś-a*). But undoubtedly with both these perfects other non-perfect forms, such as μαίνομαι ἐμάνην and δάκνω ἔδακον, helped to change them over to the new vowel-series.

The *ē*-grade seen in O.Ir. *mīd-ar* Goth. *sēl-um* Lith. *sēd-ēs* etc. (§ 848. 3 p. 393), has been conjectured for Gr. ἥσται 'sits', whose aspirate is odd as contrasted with Skr. *ās-tē*. It is quite possible that, in Greek, middle forms of \**sēd-* were confused with the verb \**ēs-*. Compare pres. Lith. *sēd-mi* § 494 p. 54.

§ 860. On the -α- of τέτροφ-α-ς -α-μεν -α-τε, on Dor. γέγον-αν and part. πεπτώς, see § 844 pp. 385 f.

The 3<sup>rd</sup> pl. ἐστᾱσι 'they stand' is contracted for \*ἐ-στά-ασι, which had taken the place of a previous \*ἔστασι. So also Ep. γεγάασι μεμᾱάσι βεβᾱάσι Att. βεβᾱσι. See § 1021. 4.

§ 861. Aspirated Perfects like δέδειχε (*√δεικ-*) πί-πλεχε (πλεκ-) κекήρuche (κηρῡκ-) τέτροφε τετράφαται (τρει-) κέκλωφε

(κλεπ-) ἤχε (ἀγ-) λέλειχε (λεγ-) ὀρωρέχεται (ὀρεγ-) τέτριψε τετρίφεται (τριβ-) have borrowed the aspirate, and put it in place of media or tenuis, from perfect stems which properly ended in an aspirate, such as γέγραφε γεγράφεται and τετινέχεται. The cause of this change was that in some perfect forms and in forms outside the perfect, these phonetic differences disappeared, and the aspirate was no longer distinguished from the tenuis or media. Thus τέτραμμαι τέτραψαι etc. and ἔτρεψα τρέψω looked exactly like γέγραμμαι γέγραψαι etc. and ἔγραψα γράψω; hence the analogy of γεγράφαμεν gives rise to τετράφαμεν instead of \*τετραπαμεν. Compare Osthoff, Perf. 284 ff., 614 ff.; Curtius, Zur Kritik der neuesten Sprachforschung, 58 ff.

§ 862. Perfects from verbal stems in *s* generally show in the middle the endings -σμαι -σμεθα -σμενος, as ἔξεσμαι ἔξωσμαι ἤκουσμαι σέσεισμαι ἔσβεσμαι τετέλεσμαι ἔσπασμαι κεκέρασμαι, thus traversing the law laid down in vol. I 565 § p. 422, by which we should expect forms without *σ*, and with a lengthening of the preceding vowel when this was short. There are some of these regular forms, as ἔξωμαι (√ *jōs*-) γέγενυμαι (√ *gēs*-) ἐφ-ευμένος (√ *eus*-). But the other set are a re-formation on the model of those with -στ-, as ἔξιςμαι instead of \*ἔξιμαι following ἔξεται, ἔξωσμαι following ἔξωσται. On the contrary, ἔξωμαι and γέγνυμαι suggested ἔξωται instead of ἔξωσται, ἐγγέγνυτο instead of \*ἐγγεγε(υσ)-ατο.

Similarly, in the Middle Voice of Perfects from Verbal-stems in *θ* and *δ*, the *σ* of -σται spread into the forms in -μαι -μεθα -μενος, as λέλασμαι following λέλασται (act. λέληθε), πέπυσμαι following πέπυσται (pres. πεύσθαι) πέπεισμαι following πέπεισται (pres. πείθω), κεκάσμεθα following κέκασται (καθ-), πέφρασμαι following πέφασται (aor. πέφραδον). Forms like Hom. κεκορυθμένος πεφραδμένος Pind. κεκαδμένος are regular. Similarly, Att. ἴσμεν (Hom. ἴδ-μεν) may be regarded as a re-formate following ἴσται; but it may also follow the pret. ἦσμεν i. e. \*ἦ-ῥιτ-σ-μεν just as ἴσσαι follows ἴσαν ἦσαν (§ 863 p. 411).

The agreement of forms like *σεῖσω ἔσεισα* (for \**σεισ-σω* \**ε-σεισ-σα*) *ἐρείσω ἤρεισα* (for \**ἐρειδ+σω* \**ῆρειδ+σα*) with such forms as *τεῖ-σω ἔ-τει-σα* (✓*τει-*) had this result, that the endings *-σαι -σμαι* etc. spread from *σέσεισαι -σμαι ἐρήρεισαι -σμαι* to the Perfect of verbal stems which ended in a vowel: *τέτει-σαι -σμαι, κέκλαν-σαι* instead of *κέκλανται, ἐγνώ-σαι, κεκέλευ-σαι*. The same cause gave rise to *ἀπο-τειστέος ἐτίσθην, κλαυστό-ς* instead of *κλαντός, ἐγνώσθην* etc. Or the *σ* of these forms from verb stems with final vowel may have originated from the 2<sup>nd</sup> sing. mid. in *-σ-θης*, as *ἐγνώσθης* (= *ἀγῆασθῆς*) *ἐμνήσθης* (Wackernagel, Kuhn's Zeitschr. xxx 312, Henry, Précis de gramm. comp.<sup>3</sup> § 102); cp. § 589 p. 129 f., § 820 p. 357, § 836 p. 373, § 840 p. 377.

Lastly, we must place here forms from *ν*-stems such as *πέφασμαι* beside *πέφαν-ται* (*φαίνω* 'I show'), *σεσήμασμαι* beside *σεσήμαν-ται* (*σημαίνω* 'I make a signal'); but we also find *ἐξαμμαι* for \**ἐ-ξαν-μαι* (*ξαίνω* 'I scratch, comb'), *ῆσχυνμαι* for \**ῆσχυν-μαι* (*ωσχύνω* 'I disgrace'), and others. We may conjecture that first \**πεφαν-σθε* \**σεσᾶμαν-σθε* became regularly \**πεφασθε* \**σεσᾶμασθε*, and then, since these looked like *ἐσπασθε κεκέρασθε*, the forms *πέφασμαι σεσήμασμαι* were made to match *ἐσπασμαι κεκέρασμαι*; on the other hand, *πέφανται* produced the form *πέφανθε*.

§ 863. The 3<sup>rd</sup> pl. of *οἶδε ἴδμεν* was in Homer *ἴσασσι* (Att. *ἴσασσι* Dor. *ἴσαντι* by vol. I § 563.2 p. 419), an ad-formate of the *s*-aorist \**ἴσαν ἴσαν*, augmented *ἦσαν* (§ 812 p. 349, § 821 p. 358). The formation of *ἴσασσι* was due to *ἴστε ἴστον* beside *ἦστε ἦστον*. Compare § 862, on Att. *ἴσμεν*.

*ἴσαντι*, associated with *ἴσταντι* 'they place', caused the Doric dialect to make the further forms *ἴσᾱμι ἴσαμεν ἰσάμεναι* etc. following *ἴσταμι* and the rest.

In Heracleian, this *σ* went on to the middle of the perfect: *γεγράψαται*. Then, on the strength of the relation of *γεγράψαται* to *ἐγράψαντο*, we get \**μεμισθώσεται* beside *ἐμισθώσαντο* — the conj. *μεμισθώσονται* is found.

§ 864. There can be no doubt that the  $\kappa$ -perfect, as *ἔστηκε*, existed in all its important features as early as proethnic Greek, although it only became a large group in Greek itself. As to the origin of the formation very diverse theories have been set forth; they are collected and criticised by Johansson, *Beitr. zur gr. Sprachkunde*, pp. 56 ff. (compare Per Persson, *Wurzelerw.*, 209 f.).

Remark. The explanation which has most in its favour is the following.  $\kappa$  is called a Root-Determinative, which came from the parent language into Greek in a few verbs; and then it became a fertile perfect suffix in pr. Greek just as  $s$  became a fertile aorist suffix in the original language. It was not confined to the perfect any more than  $s$  was confined to the aorist: we have for instance aor. *ἔθηκε* as well as perf. *τέθηκε*, aor. *ἔδωκα δώκω* as well as perf. *δίδωκα*, *δίδω* as well as *διδάσκω*, *διδ(φ)άσσομαι* for *\*δε-δφι-χο-μαι* as well as *διδ(φ)οικα*.

The favourite sphere of the  $\kappa$ -formation lay from the proethnic period of Greek in stems with  $e$ -,  $o$ - and  $a$ -vowels, as *τέ-θη-κε* *έ-ω-κε* *δέ-δω-κε* *έ-στᾱ-κε*, *βέ-βλ-η-κε* *έ-γν-ω-κε* *δέ-δρ-ᾱ-κε*. Forms like *\*τε-θη* *\*έ-ω* (Avest. *da-ḍa*) without  $-a$  and  $-t$  in the 1<sup>st</sup> and 3<sup>rd</sup> sing. may have seemed too unnatural and unlike the rest of the system; this may have brought in some  $\kappa$ -form, which afterwards spread rapidly by analogy.

Beside the above named perfect forms with the root-suffixes  $-ā$ - and  $-ē$ -  $-ō$ -, were formed others, such as *κεχάρηκε* *γεγάμηκε* *ἠθέληκε* *δεδείπνηκε* *μεμίσθικε* *τετίμακε* *δεδάκρυκε*. Compare *κεχαρηώς* *κεκοτηώς* *νενέμηται* *πεφίληται* etc., § 857. 1 and 2, p. 405 f.

Again, the relation of *ἔστηκα* to *στήσω* *ἔστησα*, of *δέδρακα* to *δράσω* *ἔδρασα*, produced perfects like *πέπεικα* beside *πείσω* *ἔπεισα* (*πείθω* 'I advise'), *πέφρακα* beside *φράσω* *ἔφρασα* (*φράζω* 'I give to understand, show' for *\*φραδ-ω*), *γεγύμνακα* beside *γυμνάσω* *ἐγύμνασα* (*γυμνάζω* 'I exercise'), *ἤρμωκα* beside *ἀρμόσω* *ἤρμοσα* (*ἀρμόζω* 'I fit, join'), *ἔσπεικα* beside *σπείσω* *ἔσπεισα* for *\*σπεπ-τ-σ-* (*σπένδω* 'I pour'), *ἔσπακα* beside *σπάσω* *ἔσπασα* (*σπάω* 'I pull' for *\*σπα-σ-ω*).

By analogy of the perfect middle (cp. *δέδραται* : *δέδρακα*) arose e. g. Phoc. *τέθηκα* (instead of *τέθηκε*) following *τέθεται*,

Att. *εἶκα* (\**ἔεκα*) following *εἶται* (\**ἔεται*), *δέδεκα* following *δέδεσθαι*, *ἔφθαρα* following *ἔφθαρται*, *κέκλικα* following *κέκλιται*, *ἤγγελα* following *ἤγγελλται*. Vice versa, mid Dor. *ἀφ-έωται* follows *ἔωκα* (§ 859 p. 408).

Following *εἶκα εἶται*, the forms *τέθηκα* *τέθεμαι* were changed in late Attic to *τέθεικα* *τέθειται*.

Following *ἔστᾱκα* : *ἔσταμεν* we get *γέγᾱκα* (Pind.) beside *γέγυμεν* (\**ḡe-ḡy-*); vice versa *ἠρίσταμεν* (Comedy) beside *ἠρίστηκα* (*ἀριστιάω* 'I breakfast').

§ 865. For the Pluperfect Greek, like Sanskrit, at first had two formations, thematic and unthematic (cp. § 555 p. 108, § 845 p. 387, § 854 p. 403).

(1) The Unthematic type is found in the Active only for Plural and Dual, e. g. *ἐπέ-πιθ-μεν* *γε-γά-την* *ἔ-στα-μεν*; the 3<sup>rd</sup> pl. ends in *-σαν*, e. g. *ἔ-στα-σαν* *μέ-μα-σαν* *ἐδείδισαν* i. e. \**ἔ-δέ-δφι-σαν* (§ 1021. 2). Far oftener, and found in all three numbers, this occurs in the Middle; as *τε-τύγ-μην* *ἐ-τέ-ταχ-το* *βε-βλή-ατο* *κε-χόλω-σο*. Compare Skr. 1<sup>st</sup> and 3<sup>rd</sup> sing. *á-ja-gan*.

(2) Thematic Forms are e. g. *ἐ-μέ-μηκ-ο-ν* (but *με-μηκ-ώς*), *ἐ-πέ-πληγ-ο-ν* (but *πέ-πληγ-α*), *ἄν-ωγ-ο-ν* (but *ἄν-ωγα*), *δεῖδιε* i. e. \**δέ-δφι-ε* (but perf. *δέ-δι-μεν*); with *κ*, *ἐ-πέ-φῶκ-ο-ν* (but *πί-φῶ-κα*). Compare Skr. *á-ca-kr-a-ti*. Sometimes it is doubtful whether a form comes here or in the VI<sup>th</sup> Present Class (§ 563 p. 111); as *λε-λάκ-ο-ντο* (cp. *λέληκα* *λελακῦα* and *ἔ-λακ-ο-ν*).

(3) To these formations are added all which are based upon an original *s*-aorist. (a) On the one hand, the forms *ῆσται* and *ἴσαν* *ῆσαν* (*ῆσμεν* *ῆσθε*); (b) on the other, those in which the Aorist ending was affixed to the Perfect stem, as *πε-ποίη-εα* *πε-ποίη-ειν* *ἐ-πε-ποίη-ειν* beside *πέ-ποίη-α*, and *ἐ-στήκ-ειν* beside *ἔ-στηκ-α*. See § 821 p. 357 f., § 836 pp. 372 ff.

§ 866. Like the thematic pluperfect *ἐ-μέ-μηκ-ο-ν* etc., mentioned in § 865. 2, the thematic imperative *κε-κράγ-ε-τε* and so forth belong to the parent speech; cp. Skr. *mu-mōc-a-ta*, § 844 p. 404.

But thematic forms occur more or less in all other formations of the Greek perfect system. Indicative Hom.



μέ-μβλ-ε-ται 'it is dear' beside μέλ-ει (which may also belong to Present Class VI, § 563 p. 111), ὀρ-ώρ-ε-ται 'is aroused' beside ὀρ-ωρ-α, ἀν-ώγω beside ἄν-ωγα, Syrac. ὀλώλ-ω beside Att. ὀλ-ωλ-α. And again, ἤκω 'I am here' may have taken the place of a perfect \*ἤκα; the last essay to explain the etymology of this verb is by Johansson, Beitr. gr. Sprachk., 62 f., who would connect it with a root ḱ-ē- 'to go'. Conj. Hom. ἀρ-ήρ-η Att. βε-βλήκ-η beside Hom. εἶδ-ο-μεν. Opt. Att. βε-βλήκ-ο-ι beside ἐ-στα-ῖ-μεν. Inf. Rhod. γηγόνειν, in Pindar κεχλάδειν. Part. Lesb. πεπληρώκων, Hom. (Aeol.) κεκλήγοντες, Boeot. τετεῦκονομείωντων.

### Italic.

§ 867. The "Perfect" of Latin and Umbro-Samnitic is a mixture of elements very widely different. Ten distinct types contribute to make it up.

(1) Genuine Reduplicated Perfects like Lat. *tu-tud-ī* = Skr. *tu-tud-ē*, *de-d-ī* = Skr. *da-d-ē* (§ 1044). In § 846 we have compared with perfect forms of other Idg. languages these others: *peperī*, *tetulī*, *meminī* *mementō*, *tetinī*, *memordī* *momordī*, *credidī*, *bibī*, *stetī*, *scicidī*, *cecinī*, *pepigī*; to which add Umbr. *dersicust*.

(2) Probable Unreduplicated Perfect forms. First *lēg-ī* *vēn-ī* and the like, with possibly *ēd-ī*, cp. § 848.3 p. 393. Next *scand-ī*, *vort-ī* *vert-ī* Umbr. *co-vortus* 'converterit', *scab-ī*, *ōd-ī*, cp. § 848.1, 2 and 4, pp. 391, 392, 394.

(3) Forms of the *s*-Aorist, both thematic and non-thematic, as *dīx-ī* *dīx-i-t* *dīx-i-mus*, cp. Gr. *ἔ-δειξ-α* Skr. *á-dikṣ-a-t*. See § 823 p. 360 f.

(4) Forms of the non-thematic *is*-Aorist, as *vīdis-tis* (*vīdis-tis*) *vīder-ō* *vīder-i-m*, cp. Skr. *á-vēdiṣ-am* Gr. *ἤδεα*. See § 841 pp. 378 ff.

(5) Thematic Aorists of Class II. Lat. *fu-i-t* *fu-i-mus*, Osc. *fuid* 'fuerit': Skr. *á-bhuv-a-t*. Lat. *scid-i-t*: Skr. *á-chid-a-t*. *fid-i-t*: Skr. *á-bhid-a-t*. *ex-uit* for \*-uy-e-t (Class II B) or

\**ex-e-t* (Class II A). Osc. *dic-ust* 'dixerit' beside \**dic-e-d* 'dixit': Skr. imperf. *á-diś-a-t*. Osc. *kúm-bēned* 'convēnit' *ce-bnust* 'huc venerit'<sup>1</sup>): Skr. *á-gam-a-t* Avest. *γm-a-ḥ*, √ *gem-*. From Osc. *pert-emust* 'peremerit' the ind. \**ēme-d* is to be inferred. Osc. *ana-saked* or *ana-zaked* 'consecravit' (Bréal and Duvau, *Mém. Soc. ling.*, vi 51, 227) beside Lat. *sanciō*. Pelign. *afded* 'abiit' for \**af-je-d* (Thurneysen, *Rhein. Mus.* XLIII 348), cp. Gr. opt. *ī-o-i*. So also Lat. *vort-i-t vort-i-mus* (cp. 2) may be connected with Skr. *á-vrt-a-t*. See § 483 p. 32, § 523 pp. 86 ff., § 528 p. 91.

(6) Possibly amongst forms like *lēg-i-t lēg-i-mus* (√ *leg-*) were some like Gr. *ἐ-μῆδ-ε-το* (√ *med-*) Skr. *á-sāh-a-t* (√ *segh-*). See § 841 Rem. p. 378.

(7) Probably reduplicated thematic aorists of Class VI. *te-tig-i-t te-tig-i-mus*: Gr. *τε-ταγ-ών*. *pe-pig-i-t*: Gr. *πε-παγ-ο-λη-ν* beside *πέ-πηγ-α*. *ce-cid-i-t*: *κε-καθ-εῖν* 'to hurt, despoil' *κε-κάθ-ο-ντο* beside *ἐκεκλήθει* 'ὑπεκχωρήκει' (pres. *κῆδω*). *pe-pul-i-t*: *πε-παλ-ών*. *pe-per-i-t* for \**pe-par-e-t*: *πε-πορ-εῖν* 'δοῦναι' beside *ἔ-πορ-ο-ν* 'I gave, brought', cp. 1<sup>st</sup> sing. *pe-per-ī* and *πί-πω-ται* § 846 p. 388. *de-d-i-t* Osc. *de-d-e-d* Umbr. *ře-ř-e* pr. Ital. \**de-d-e-t*:<sup>2</sup>) Skr. imperf. *á-da-d-a-t* (§ 562 p. 110 f.). Compare § 564 p. 111.

To these must be added (8) the Latin perfect in *-vī* and *-uī*, (9) the Umbr.-Samn. perfect with *f*, and (10) the *t*-perfect of Oscan, Pelignian, and Volscian; see §§ 873 ff.

This fusion of the forms of Aorist and Perfect implies that the Idg. Perfect had become a historic tense as early as proethnic Italic.

1) Conway (*Amer. Journ. Phil.* XI 308) defends the old view of *cebnust* as a reduplicated form.

2) The Umbr.-Osc. ending *-e-d* is odd as compared with forms like *fust*, where the short vowel of the last syllable is syncoated (I § 633 p. 474). Whether the law of syncoation allowed certain exceptions in the case of a final dental (say, depending on what the preceding syllable was, or the accent), or whether *-e-* in this *-e-d* is due to some analogy, I do not here discuss.

Of the endings of the perfect indicative, these belonged to the perfect in Idg.: Lat. *-ī* in the 1<sup>st</sup> sing. = Skr. *-ē*; *-tī* which fused with the aorist element *-is-* made the 2<sup>nd</sup> sing. (: Skr. *-tha* § 988.3); and *-imus* in *tutud-imus vĕn-imus* may be equated with Skr. *-i-ma*, Avest. *-ama* Gr. *-αμεν* Goth. *-um* (*ste-ti-mus* = Gr. *ἑσταμεν* Skr. *ta-sthi-má?*). To the *is*-aorist belongs Lat. 2<sup>nd</sup> pl. *-is-tis*, also *-is-tī* in 2<sup>nd</sup> sing. (see above), and possibly *-ērunt* in the 3<sup>rd</sup> plural. To the thematic aorist belong Lat. 3<sup>rd</sup> sing. *-i-t*, earlier *-e-d* (*phēvhaked*), whose agreement with Umbr.-Samn. *-e-d* is most important (the *-e* of the 3<sup>rd</sup> sing. perf. Idg. must doubtless have given place to *-e-d* = Idg. *-e-t* completely in pr. Italic), and partly *-i-mus* in the 1<sup>st</sup> plural. The 3<sup>rd</sup> pl. Umbr.-Samn. *-ens* and Lat. *-ērunt* are ambiguous.

The precise way by which this fusion of different endings came about is not clear; nor will it be made clear so long as the 3<sup>rd</sup> singular and 3<sup>rd</sup> plural are the only endings we know in Umbro-Samnitic dialects (as to Osc. *manafum*, see § 874). Thus much only seems certain, that as early as proethnic Italic some thematic forms had joined on to the old perfect system; cp. Lat. *de-d-i-t* Osc. *de-d-e-d* beside Lat. *de-d-ī*, *pe-pig-i-t* beside *pe-pig-ī*.

Beside *-e-d* = Idg. *-e-t*, Latin has also *-īd* *-īt*, on inscriptions *-eit*, as *fuueit redieit*. Since *interieisti* also occurs on inscriptions, the simplest explanation is that the *ī* came from the 1<sup>st</sup> sing. which had *-ī*.

Remark. Bartholomae (Stud. idg. Spr., II 195) derives *fuit* from Idg. *\*bhuy-i-t* or *\*bhuy-ē-t*, which seems to me very far-fetched. I identify *fuit* with Skr. *á-bhuv-a-t* (Osc. conj. *fuid* for *\*bhuy-ē-t* § 872), and I regard *fui* (Ennius has *fūimus*) as a re-formate like *plūi* (cp. Osthoff, Perf. 254 f.).

§ 868. The Idg. *e* of the reduplicating syllable seems to have been kept without change in proethnic Italic. Compare O.Lat. *phē-vhaked* 'fecit' Osc. *fe-facid* 'fecerit', Lat. *de-dī* Osc. *de-ded* Umbr. *re-ře*, Lat. *me-mordī pe-pugī ste-tī*, Umbr. *de-rsicust* 'dixerit' *pe-purkurent* 'poposcerint, rogaverint'.

But Latin, if the vowel of the syllable which followed the reduplicator was the same as that of its present stem, assimilated this *e* to it; as *mo-mordī* : *mordeō*, *cu-currī* : *currō*, *pu-pugī* : *pungō*, *sci-cidī* : *scindō*, *di-dicī* : *discō*, *sti-tī* : *sistō*; whilst in Old Latin we still find the regular forms *me-mordī* *pe-pugī* etc. (see above). Compare Skr. *u-vāc-a* instead of *va-vāc-a* following *uc-yā-te uktā-s* and the like, § 851 p. 400. However, *e* remained if the vowel of the next syllable, and the present vowel, were of the *e*-kind; as *pendī* : *pendō* *pendeō*, *pe-pēdī* : *pēdō*; and the same if it differed from the present vowel, as *ce-cinī* : *canō*, *ce-cidī* : *cadō*, *pepulī* : *pellō*, *pe-perī* : *pariō*, *ste-tī* : *stō stās* etc.

In compounds four syllables long (in the 1<sup>st</sup> and 3<sup>rd</sup> singular), the reduplicator underwent syncope in proethnic Latin, as a consequence of the accentuation then given to the first member; as *reppulī rettulī reccidī* for *\*ré-pepulī \*ré-tetulī \*ré-cecidī*, *dēcidī attigī incurrī* for *\*dē-cecidī \*āt-tetigī \*in-cecurrī* (I § 633 p. 474).

That both reduplicated and unreduplicated forms occurred in pr. Italic within the perfect system of the same verb is shewn by O.Lat. *phē-phakēd* Osc. *fe-facust* as compared with Lat. *fēcī* Umbr. *fakust*. Compare further Lat. *sci-cidī* and *scidī*, *te-tulī* and *tulī*, Umbr. *de-rsicust* and Osc. *dicust*, Lat. *ce-cinī* and Umbr. *pro-canurent*. Thus we have no right to assume that Lat. *tulī* was abstracted from compounds in which the reduplicator had suffered syncope, as in *rettulī attulī*. When a form has only survived in compounds, as *-culī* (*per-culī*), it is impossible to say whether it never was reduplicated or whether syncope has hidden the reduplication.

This loss of reduplication in Latin compounds helped to link reduplicated and unreduplicated forms all the closer.

Beside Lat. *abs-condidī* (from *abs-condō*) the form *abs-condī* sprang up on the analogy of *scandī* : *scandō*, since *condō* in this word joined with *abs* had ceased to be regarded as a compound; cp. *absconsum* beside *absconditum*. On the contrary, *condidī* :

*condō*, *crēdidī* : *crēdō* and the like gave rise to perf. *dēscendī* beside *dēscendī*.

As regards verbs with initial vowel, such forms as Skr. *an-āś-a* (§ 851 p. 401) and Gr. *ᾠ-ωρ-α* (§ 858 p. 408) were foreign to Italic. Lat. *ēd-ī ēm-ī* (from *ed-ō em-ō*), as well as *sēd-ī vēn-ī*, *ēg-ī co-ēpī coepī* (from *ag-ō ap-iō*), as well as *cēp-ī pēg-ī*, *ōd-ī (od-iō)*, as well as *fōd-ī*, may be regarded as forms which never had any reduplication at all. See § 848 p. 393 f., § 870.

§ 869. Of the old Ablaut in the Root Syllable of the Perfect little trace is left.

The reason for the variants *tutūdī* and *tutudī* is doubtless a difference of ablaut, such as we see in Skr. *tu-tūd-a tu-tud-ūr* (cp. also Goth. *stat-stāut*); then *tu-tūd-* will come from *\*tū-taud-*, as *in-clūdō* for *\*in-claudō*.

The *o*-grade of the sing. indic. appears in *spopondī totondī*, which had run into one verbal system with the *éjo*-presents *spondeō tondeō* (§ 802 p. 338). *spopond-imus* instead of *\*sperpend-* like Gr. *πεπόνθ-αμεν* instead of *πε-παθ-* (part. *πεπαθῆναι*). *momord-* in *momordī momordimus* (pres. *mordeō* like *spondeō*) may be both Idg. *\*me-mord-* and *\*me-mŷd-* (Skr. *ma-mard-a ma-mŷd-ur*). Similarly, we have *cu-currī* from *currō* for *\*corsō* *\*kŷsō* (§ 662 p. 197). Umbr. *pepurkurent* from *✓prek-* may like *de-rsic-ust* contain the weak stem (*\*pe-pŷk-*), although persklum persnimu, which have changed the position of *r* (§ 674 p. 207), suggest some doubt.

Strong and Weak forms may be found, again, in *meminī tetinī pepulī tetulī* (*memin-i-mus tetul-i-mus*: Gr. *μέμα-μεν τέτλα-μεν*, as Skr. *jagm-i-ma : jagan-ma* Gr. *βέβα-μεν*, and as Skr. *jagm-i-vás- : jagan-vás-*); only the weak form in *pepigī* for *\*pepagī* (but Gr. *πέπηγε*) *tetigī cecidī*. But it is doubtful how far we are to look for the origin of these perfects in old reduplicated aorists (§ 867. 7 p. 415).

Doubtless it is the weak stem in Osc. *fefacust* beside Lat. *fēcī* from *✓dhē-*. The *a* of Lat. *vhevħaked* is difficult.

Remark. If it is short, this seems to prove that at the time of the Manios inscription (attributed to the 6<sup>th</sup> century B. C.) the weakening of \**pēpagi* to \**pēpigī* and the like (I § 680 p. 547) had not yet been completed. But hear what Bücheler says (Rhein. Mus. XLII 317): "After the second *h* the carver first put *i*, which he afterwards erased, though not so completely but that the intent is clear". Again, p. 318: "The quantity of the *a* is not known. What we know of the reduplicated perfects which are preserved in Latin, makes it likely that the *a* was short. Possibly this is the reason of the *i* which was first engraved (*cano cecini, infactus inficetus*)". If this *i* is rightly so explained, and if the *a* put in on second thoughts was short, it must be a reversion to the old type on the analogy of *faciō* etc. (as with *in-factus*); but such a reversion in the perfect is hardly credible. If *ā* was meant, it must be assumed that \**fefāk-* was made in connexion with \**fefak-* \**fefik-* on the analogy of some such form as \**pepāy-* (beside weak \**pepāg-* \**pepig-*). — We may now refer to Buck, Der Vocalismus der osk. Spr., 26 f.

The weak stem (regular) in Lat. *de-d-ī* = Skr. *da-d-ē* (cp. *tu-tud-ī* = Skr. *tu-tud-ē*) and in Umbr. *te-ř-ust* 'dederit' = Skr. *da-d-úš-* (cp. *de-rsic-ust* = Skr. *di-diš-úš-*), also Lat. *ste-t-ī* = Skr. *ta-sth-ē*. The form \**de-d-e-d*, common to all Italic dialects, and Lat. *ste-t-i-t*, correspond exactly to the present forms Vestin. *di-d-e-t* 'dat' Lat. *si-st-ō* Umbr. *sestu* § 543 p. 103, § 553 p. 107. Uncertain it is whether Lat. *sistimus* is \**si-sta-mos* answering to Gr. ἵσταμεν, and it is equally uncertain whether *ste-ti-mus de-di-mus* are \**ste-ta-mos* \**de-da-mos* precisely like Skr. *ta-sthi-má* Gr. ἵσταμεν Skr. *da-di-má*.

§ 870. A word of explanation is needed on those reduplicated perfects which have *ē* where the present has an *a*-sound. Lat. *fēct* (beside *phēphaked*): *faciō*, *capī* : *capiō* (cp. Goth. *hōf*), *jēcī* : *jaciō*, *pēgī* (beside *pepigī* Gr. Dor. *πίνᾱγῃ*): *pangō*, *frēgī* : *frangō*; Osc. conj. *hipid* 'habuerit' fut. perf. *hipust* 'habuerit': *hāfiest* 'habebit', *sipus* 'sciens': Lat. *sapiō* (cp. O.H.G. *int-suab*). With initial vowel Lat. *ēgī* : *agō* (cp. O.Icel. *ōk*), *co-ēpī* *coepī* : *capiō*. *ē* is certainly original in *fēct*,<sup>1)</sup> compare Gr. ἔθηκα (§ 864 Rem. p. 412), and doubtless

1) Bronisch sees *fēk-* in Umbr. *feito fetu feetu fetu* 'facito' = \**fēke-tōd*. Another explanation, but less probable, is offered by Conway, Amer. Journ. Phil. xi 307, Class. Rev. v 300.

in *frēgī*, compare Goth. *brēkum* from  $\sqrt{bhreg-}$  (on *frangō* see § 632 p. 168), and perhaps *jēcī* (Johansson, Beitr. gr. Spr. 61). Beginning with these forms, *ē* spread to those which originally had *a*; in the causing of which not only the present with *a*, but also the *to*-participle had some effect, *captu-s* for example being like *factu-s*; the reason why *scabī* (= Goth. *skōf*) remained, from *scabō*, whilst *\*cāpī* (= Goth. *hōf*) changed to *cēpī*, was perhaps the lack of any participle *\*scaptu-s*. It was natural, too, to make *pēgī* like *frēgī*, simply because the verbs had opposite meanings.

§ 871. Perfect from Present stems with stem-characteristic. Compare § 847 p. 390 f.

Lat. *po-poscī* from *poscō* for *\*por(c)-scō*, cp. Skr. *papracha*. *fe-fellī* for *\*fe-fallī* from *fallō* for *\*fal-nō* (§ 608 p. 149). *tetend-ī* from *tendō*,  $\sqrt{ten-}$  (§ 564 p. 111, § 696 p. 225).

Lat. *pre-hendī* from *-hendō* from  $\sqrt{ghed-}$ , *lambī* from *lambō* beside O.H.G. *laffu*, *pandī* from *pandō* beside *pateō* (§ 632 p. 168 f.). *cūdī* from *cū-dō* (§ 696 p. 225). Osc. *com-parascuster* 'consultus erit' beside Lat. *-pescō* for *\*perc-scō* or *\*parc-scō* (§ 674 p. 207). Umbr. *eiscurent* 'poposcerint, arcesierint' beside pres. Skr. *ichā-ti* etc. (§ 670 p. 203). If Bugge's explanation of the Osc. fut. perf. *fifikus* as 'feceris' is right (Altital. Stud. 31), we must allow Oscan a present stem *\*fi-fēk(o-)*, showing the same reduplication as Gr. *τί-θη-μι*, and to be compared with Vestin. *di-d-e-t* 'dat' Lat. *si-stō* etc. (§ 553 p. 107); cp. Skr. part. *vivak-vās-* from pres. *vī-vak-ti* (§ 850 p. 398).

*minuī sternuī* (pres. *mi-nuō ster-nuō* § 649 p. 185) keep the present stem in the perfect; this being due to imitation of *ex-uī : ex-uō*, *pluī : pluō* and the like. The same is true of perf. *statuī* from the denominative *statuō*.

§ 872. The Moods of the Idg. perfect, and its preterite the Pluperfect, died out in Latin owing to the influx of sigmatic aorist forms into the perfect system. Still, *momentō* = Gr. *μεμάρτω* remains, because *meminī* was used as a perfect present.

Umbro-Samnitic has an *ē*-conjunctive (§ 926 c). Osc. *fefacid* 'fecerit' *hipid* 'habuerit' *fuid* 'fuerit', Umbr. *stīti-steteiens* 'stiterint'. From the *f*-Perfect Osc. *sakrafīr* 'sacraverint', Umbr. *pihāfei* = *\*pihāfēr* 'piaverint', from the *t*-Perfect, Osc. *trībarakattīns* 'aedificaverint'. This Conjunctive may be derived from either conj. of the Idg. perfect (cp. Gr. *πρόνθ-η* Skr. *paprc-ā-si*) or conj. of the thematic aorist (Osc. *fuid* = Skr. *bhuv-ā-t*).

In the same area, the Idg. *ues*-participle held its own. Osc. *sipus* 'sapiens' probably like nom. sing. Skr. *vidúṣ* Avest. *viduš* (II § 136 p. 439 f., III § 193 p. 73). From this form was built up the future perfect (cp. W. Schulze, Kuhn's Zeitschr. xxviii 272 f., the Author, Ber. sächs. Ges. Wiss., 1890, pp. 223 ff.), by combining it with injunctives, used for future, of the stem *s-o-* (from *es-* 'esse'). 2<sup>nd</sup> sing. *-us* = *\*us-ses*, 3<sup>rd</sup> sing. *-ust* = *\*us-set* (*\*us-sed*): Umbr. *kuvurtus* 'converteris' *dersicust* 'dixerit', Osc. *fefacust* 'fecerit'. Osc. *fust* 'fuerit' (beside *fust* 'erit') for *\*fu-ust* from conj. *fuid*. If this *\*fu-ust* *\*fast* existed in Umbrian too, this explains the form *amprefuus* 'circumieris' (beside *apr-etū* 'circumito')<sup>1)</sup>, which will be due to analogy of it. On the analogy of the I<sup>st</sup> future, where *-zent* is the ending of the 3<sup>rd</sup> pl., — as Osc. *censazet* 'censebunt' Umbr. *furent* 'erunt', — arose the plurals Osc. *trībarakattuset* 'aedificaverint' Umbr. *pepurkurent* 'poposcerint'. But we also find Umbr. *covortuso* 'conversum erit, converterint' for *\*covortus so(r)*, *benuso* 'ventum erit, venerint' for *\*benus so(r)*.

§ 873. The *us*-formation mentioned in the last section was used with other preterite participles besides those described.

1) The *u* is doubtless long in Osc. *trībarakattuset* too; if it had been short, we should expect *\*trībarakattiuset* (I § 49 p. 41). I assume the same analogy here. — G. Bronisch, in his new work on the Osc. *i-* and *e-*vowels, regards the nominative ending *-us* as earlier *\*-ōs* for *\*-ūs*, and supports his view by *amprefuus* and *trībarakattuset*.



Umbr. *en-telust* 'intenderit' a-pelust 'impenderit' derived from \**tend-lo-* \**pend-lo-* (Lat. *pendulu-s* 'hanging'). Compare the Slavonic part. pret. act. with *-lo-*, as *nes-lŭ* from *nes-ti* 'to carry' (II § 76 p. 212).

Umbr. *sesust* 'sederit' from \**sesso-s* 'seated, sitting' (Skr. *sattā-s*). So too the Osc. *t*-preterite, which we must follow Danielsson in connecting with the *to*-participles, is derived from the fut. perf. in *-t-us-*. First arose forms like *trībarakattuset* from partic. *trībarakato-*. On the analogy of \**aamanafust* to ind. *aamanaffed* etc. arose such Indicatives as *prufatted* 'probavit' and Conjunctives like *trībarakattins*. The same new formation is seen in Pelign. *coisatens* 'curaverunt' and in Volsk. *sistatiens* 'statuerunt' = \**sistatens*. The frequent spelling with double *t* in Oscan is the same in principle as *ff* in the *f*-perfect; it is possible that it is entirely due to the analogy of the *f*-perfect, which was the model for the whole *t*-perfect system (§ 874).

Remark. In Umbr.-Oscan, as we shall see in § 874, the *ā*-denominatives can make a strong perfect. It may therefore be held that as the perfect *pruffed* was made for the present stem *profā-* 'probare', so the perfect *prufatted* was made for \**profātā-* '\*probatare'. But I prefer the explanation given above, so long as no forms are found from a stem \**profātā* or anything like it.

An origin similar to that of these future perfects must be postulated for Umbr. *combifiansiust* beside *combifiatu* 'nuntiatio', *purdinsiust* 'porrexerit' beside *pur-ditom* 'porrectum', which presuppose noun-stems \**combifiankio-* \**purdinkio-* (see Johansson, Beitr. z. gr. Sprachk., 84 ff., 147 ff.).

§ 874. We pause a moment here to explain the origin of the *f*-perfect in this Umbro-Samnitic. Examples are: indic. Osc. *aamanaffed* 'mandavit' *aikdafed* '\*aequidavit', Osc. *manafum*, which may be 1<sup>st</sup> sing. ('mandavi') or 1<sup>st</sup> pl. ('mandavimus'), it is uncertain which; conj. Umbr. *pihafei(r)* 'piaverint' Osc. *sakrafir* 'sacraverint'; fut. perf. Umbr. *ateřafust* *andirsafust* 'circumtulert' *ambrefurent* 'circumierint'.

This formation belongs to the Italic imperfect compounded with \**bhy-ā-m* 'I was' (Lat. *amā-bam* Osc. *fu-fans* 'erant') and

the Latin future compounded with *\*bhū-ō* 'I shall be' (*amā-bō*), found also in Keltic (§ 899); the Umbr.-Samn. *-fed* is indic. aor. = Idg. *\*bhū-e-t* (Avest. *bva-ḥ*), cp. Lat. *fuit* Osc. conj. *fuid*, to be connected with Skr. *á-bhuv-a-t* (§ 867.5 p. 414). If Osc. *mana-fum* is 1<sup>st</sup> sing., its second part must be = Idg. *\*bhū-o-m*. In the *ff* of Oscan, as *aamanaffed*, we should perhaps recognise another effect of the *u* which once followed *f*. But it is possible to explain the sharpening of the consonant if we take as our starting point *f* (for *fu*); see Danielsson, Pauli's Altit. Stud. iv 139 ff. For the Umbr.-Samn. conjunctive stem *-fē-* = *\*fu-ē-* may be equated with O.C.Sl. *bě* (§ 578 p. 119, § 587 p. 128).

The attraction of these forms into the Perfect called up a future perfect with *-us-*. Umbr. *ampr-e-fuus* shows that the *u* was long; and this may be explained as due to the analogy of the fut. perf. *\*fast* = Osc. *fust* for *\*fu-ust* (§ 872 p. 420 f.).

No complete explanation has been given for the forms Umbr. *portust* 'portaverit' beside *portatu* 'portato', Osc. *upsed* 'operatus est' 3<sup>rd</sup> pl. *uupsens* *ουνσις* beside *úpsannam* 'operandam', *prúffed* 'probavit' *prúftú-set* 'probata sunt' beside *prúfatted* 'probavit', *urust* 'oraverit'. They look as though formed after the fashion of primary *a*-verbs with strong perfect. Umbro-Samnitic perhaps had, as Latin had, primary *a*-verbs with strong perfect (cp. *juvare javi* § 583 p. 124); and thus the *a*-denominatives may have followed their inflexion in some particulars, as in late Latin we meet forms like part. *probitus* or imper. *probutō* from *probare* (see Georges, Lex. Lat. Wortf., 556).

§ 875. We now return to Latin, in order to finish with the perfect in *-vī* and *-uī*, as *i-vī sci-vī sē-vī plē-vī nō-vī flā-vī finī-vī amā-vī* and *genuī texuī crepuī monuī saluī*.

Of the attempts hitherto made to explain these, which are summarised by Stolz, Lat. Gr.<sup>2</sup> 370 f., and more fully by Per Persson, Wurzelersw. 210 (Ernault, Du Parfait, 63 and 92 f. should also be consulted), the simplest and most credible is the

following. The analogy of *mō-tu-s* (Umbr. *comoho-ta* abl. 'com-mota') *jū-tu-s* : *mōv-i jūv-i*, and the like, suggested (1) *plēvī nōvī amāvī* beside *plētū-s nōtū-s amātū-s* etc., to which were added *sēvī tōvī* etc.; and (2) e. g. *\*gene-ūi* beside *\*gene-to-s* (*genitus*), which became *genuī*.<sup>1</sup>) Between *genuī* and *flāvī*, then, there would be the same relation as between Gr. *ὁμώμωκα* and *δέδωκα*.

The reason why *mōvī jūvī* had this influence, in spite of their present *moveō juvō*, is the specially close connexion between the *to*-participle and the perfect active; *mōtus sum* being the passive of *mōvī*. The Gr. *τέθηκα δέδωκα* etc., it will be remembered, caused the *x*-type of perfect to spread (as *βέβληκα ἔγνωνκα*), in spite of their connexion with the aorist *ἔθηκα ἔδωκα*, which themselves were not fertile.

Remark. We must assume that *nōv-i* goes along with Skr. *ja-jñāu*, *nāu-i* with Skr. *snāu-ti*, and *nēv-i* with Goth. *enēv-um*. The old part. perf. active has also been brought in evidence, and *sēvistis* derived from *\*sē-ves stes*, *sēvimus* from *\*sēves smos* (though *\*sēves-smos* could regularly only become *\*sēvemus*); and others have connected *genuī* with *in-genuo-s*, *sīri* with *dē-sivāre*, and so forth.

The forms in *-vī* and *-ui*, like all perfect forms not based upon the *is*-aorist, were attracted to take the endings of this tense in the other persons: *nōvistī nōvistis genuistī genuistis nōverō genuerō nōverim genuerim nōveram genueram nōvissem genuissem*.

A few original *s*-perfects were transformed to match *genuī*: *pēxui nēxui* instead of *pēxī nēxī* (§ 823 p. 361) from *pectō nectō* (§ 683 p. 214 f.), *messui* instead of *\*messī* from *metō*.

### Keltic.

§ 876. Outside of Irish, few survivals remain of the Idg. perfect. Gall. *dede* 'dedit' or 'posuit', Mid.Cymr. *ciglef* 'audiui' = O.Ir. *ro chuala*.

1) Beside *pōnō* for *\*po-s(i)nō* stood *po-sīvī* and since *po-situ-s* was incorrectly analysed *pos-iu-s*, there arose the other Perfect form *posuī*. See Osthoff, Perf., 261 and 611 f.

Of Irish examples, we have already cited, and compared with perfect forms from other Idg. languages in § 846, the following: *do-ro-chair* 'cecidit, periit', *ro gēnar* 'natus sum', *do-mēnar* 'putavi', *ro gegon* 'interfecit', *ro lil* 'adhaesit' 3<sup>rd</sup> pl. *ro leldar*, *ro chuala* 'audivi', *ro bōi* 'fuit', *ad-con-dairc* 'conspexit', *do-roigu* 'elegit', *ro cechan* 'cecini'; in § 847 *im-chom-arc-air* 'interrogavit', in § 849 *ro tāich* 'fugit' 3<sup>rd</sup> pl. *ro tāchatar*.

To these examples a few more may be added which show the reduplication either retained, or changed only in accordance with the phonetic rules. *ro reraig* 'porrexit' for \**rə-rōg-e*, pres. *rigim*, √ *reg-*: cp. O.Icel. *rak*. *ro memaid* 'he broke' (intr.) 3<sup>rd</sup> pl. *ro me-md-atur*, pres. *maidim*. *ro de-daig* 'oppressit' 3<sup>rd</sup> pl. *ro de-dg-atar*, pres. *for-dengat* 'opprimunt'. *fris-racacha* 'speravi', pres. *ad-chiu* 'I see'. *ro selaig* 'he struck down' i. e. *se-slaig*, pres. *sligim*: cp. Goth. *slōh* § 888. *ro cechladatar*, 'suffoderunt', pres. *-cladar* 'he is buried'. *ro sescaind* 'he sprang', pres. Mid.Ir. *scinnim*: Skr. *ca-skānd-a* 'he sprang'; on the vocalism of this root see § 520 p. 84. *ro sescaing* 'he leapt out', pres. Mid.Ir. *scingim*. Mid.Ir. *ro leblaing* 'he leapt' instead of \**lelaing* beside pres. *lingim* O.Ir. *lengaim* (R. Schmidt, Idg. Forsch. i 48 f.). *ro cechaing* 'he stepped', pres. *cengaim*.

The perfects *fo nenaig* 'he cleansed' and *ro senaich* 'it dropped, trickled' beside pres. *nigim* √ *neig-* and *snigid* √ *sneigh-*, may be derived from \**nenoige* \**sesnoige*, as nothing certain is known of the treatment of *oi* in internal syllables. But perhaps they are modelled after perfects like *reraig*, cp. Goth. *baþ* from *bidja* § 722 p. 253.

Mid.Ir. *ro-fiu* 'he slept', not from √ *suep-*, but, as Thurneysen holds, from √ *ues-* (Skr. *vas-* 'to pass the night' perf. *u-vās-a*), therefore for \**ue-uo(s)-e*, which became first \**fi-ui*, 3<sup>rd</sup> pl. *-feotar* for \**ue-uo(s)-atar*; cp. *feiss* 'sleep'. Observe the analogical *e* of the reduplicator, for by I § 66 p. 54 f. \**ueuos-* must have become \**uouos-*.

§ 877. Perfects based upon presents with stem-characteristic (cp. § 847). *in-roigrann* 'I pursued' beside

*in-grennim* from  $\sqrt{ghredh-}$  (§ 628 p. 165). *do-sefainn* 'pepuliť' 3<sup>rd</sup> pl. *do-sefnatar*, if the present *sennim* § 613 p. 151 is rightly derived from *\*syem-nō*. *ro nenasc* 'I bound, promised' beside *nascim* from  $\sqrt{nedh-}$  (§ 675 p. 208).

*ad-gēn* 'cognovi' 3<sup>rd</sup> sing. *-geuin* 1<sup>st</sup> pl. *-gēnammar* 3<sup>rd</sup> pl. *-gēnatar* comes from the Idg. perfect *\*gē-gn-ō-* (Skr. *jajñāu* Gr. *ἐγνώκα ἐγνώσμαι*, also perhaps Goth. *\*kat-knō*, see p. 128 footnote 1), from  $\sqrt{gen-}$ . The plural may be derived at once from this ground-form. The 1<sup>st</sup> and 3<sup>rd</sup> sing., which point to *\*ge-gn-a* and *\*ge-gn-e*, are later re-formates. Compare in Sanskrit the forms *jajñimá jajñivds-* beside *jajñāu* etc. (§ 850 p. 396).

§ 878. The syllable of reduplication usually has the vowel *e* quite clear; e. g. *ro ge-gon ge-guin* like Gr. *πέ-φαται*, *ro ce-chan ce-chuin* like Lat. *ce-cinī*.

By dissimilation, the initial consonant of the unaccented reduplicating syllable was dropt after *ro*, after which the *e*-vowel of this syllable was contracted with *ro* into the genuine diphthong *oi* (I p. 483 footnote 1). Of the examples already given *do-roigu* for *\*ró-gegu*, and *in-roigrann*, come in here. Others are *for-roichan* beside *ro cechan*, *fo-roiblang* beside *ro leblang*, *arob-roinasc* beside *ro nenasc*, *fo-roichlaid* beside *ro cechladatar*.

By a process of re-formation which cannot now be traced exactly we have *u* in the reduplicator of *ro chuala*, for *\*cu-cloy-a*; the Mid.Cymr. *ci-glef* (3<sup>rd</sup> sing. *ci-gleu*) gives no help in determining the age of Ir. *cu-*, because its *ci-* admits of more than one explanation. In Irish, *i* seems also to have been used in reduplicating *i*-roots: *ro lil* 'adhaesit' pres. *lenim*  $\sqrt{lei-}$ , *ro giuil* 'adhaesit' pres. *glenim*  $\sqrt{glei-}$ , *do-rad-chiuir* 'redemit' 1<sup>st</sup> sing. *-chēr* pres. *crenim*  $\sqrt{grei-}$  (§ 598 p. 142, § 604 p. 145). The last attempts to deal with this difficult group of perfect forms are those of Thurneysen, Kuhn's Zeitschr. xxxi 89, and R. Schmidt, Idg. Forsch. i 62 f.<sup>1)</sup> The forms which must be

1) Thurneysen informs me that he does not back his explanation against R. Schmidt's, which he recognises as being right in all essentials.

postulated as those which just preceded these show the personal ending affixed immediately to the root-final consonant: 3<sup>rd</sup> sing. \**li-l-e* \**gi-gl-e* \**ki-kr-e*, 1<sup>st</sup> sing. \**ki-kr-a* (-*chēr*) 3<sup>rd</sup> pl. \**li-l-ontor* (*leldar*). And again the perfect of *renim* 'I sell' (for \**pr-na-mi* from  $\sqrt{\text{per-}}$ , § 598 p. 141) shows this perfect formation, 3<sup>rd</sup> sing. *ro rir* = \**pi-pr-e* (this first becomes \**ir*, instead of which we get *rir* by § 476 p. 23), whilst what one would expect is \**reir* = \**pe-pr-e* (with strong stem \**pe-por-e*). R. Schmidt conjectures that this \**pe-pr-e* and \**li-lo(i)-e* etc., the present formation being the same for both, became \**pi-pre* and \**li-le* by mutual analogy. Is it not better to suppose that -*rir* is based upon a reduplicated preterite \**pi-pr-e-t*, in Class IV? In Thurneysen's opinion the Conjunctive of this present class is represented in futures like *do-bēr* (§ 565 p. 112), and we shall see anon (in § 879) that some of the Keltic perfects probably come from a thematic preterite (aorist or imperfect). -*ciuir* too may be derived from \**qi-qr-e-t*, as the "root" *qrei-*, it may be conjectured, is possibly an extension of *qer-* 'make'.<sup>1)</sup> If this be the origin of -*rir* (and -*ciuir*), the difficulty of -*lil* and the rest at once vanishes.

*t-ānac* 'I came' 3<sup>rd</sup> sing. *t-ānaic* beside Skr. *anāśa*, also to be compared with Gr. *ἐν-ήνεγν-ται*, if *ἐν-* is the preposition and not a reduplicator. See § 846 p. 390, § 858 p. 408.

§ 879. Beside the reduplicated forms appear unreduplicated not a few. To those already cited, *do-ro-chair*, *ro bōi*, *ad-con-dāirc*, *im-chom-arc-air*, *ro tāich*, we may add 3<sup>rd</sup> sing. *ro scāich* beside *scuchim* 'I yield', *ro gāid* beside *gudim* 'I beg', 1<sup>st</sup> sing. *fo-ro-damar* for -*damar* beside *fo-daim* 'patitur', 3<sup>rd</sup> sing. *du-fu-tharcair* 'wishes'.

There is no proof that these forms have lost a reduplicating syllable in Keltic itself. Like *ro-mādar* (§ 848. 3 p. 393), they

1) See Per Persson, *Wurzelerweiterung* p. 108 (where Ir. *taid-chur* 'redemptio' must be struck out; as I learn from Thurneysen, the word rather means 'return').

are forms which never had reduplication; *-dairc* may be compared with Skr. *darś-i-vas-* (§ 848. 2 p. 392).

Unfortunately there is nothing to decide whether in the plural of the Irish perfect, in such forms as *ro cechnammar cechnaid cechnatar*, the vowel preceding the personal ending was the thematic vowel, or Idg. *a* (= pr. Kelt. *a*); in the 1<sup>st</sup> plural another question offers, whether *a* does not come from the initial sonant of the personal ending (*-mm-*). If, as is most probable, these are thematic, there may have been thematic preterites amongst the above unreduplicated forms, and *-dairc*, for instance, may be identical with Gr. *ἔδραξε*, *bōi* with Skr. *ābhavat*; *do-cer* 'cecidit' too, beside *do-ro-chair*, gives the impression of such a preterite. Compare the aorist forms which have obtained a footing in the Latin Perfect, e. g. *scidit* = Skr. *āchidat* (§ 867. 5 p. 414). In § 878 p. 427. I conjectured that *-rir* was a reduplicated thematic aorist. In the 3<sup>rd</sup> singular, the original endings *\*-e* (perf.) and *\*-e-t* (thematic pret.) must have run together in Irish; so in the 1<sup>st</sup> plural with *-a-m-* (Skr. *-i-ma*), *-mm-* (Goth. *-um*), and *-o-m-*; and this may have brought about the commingling of the different tenses.

§ 880. Of the Idg. vowel gradation in the Root Syllable little now remains. Within the indic. active, the differences of gradation between singular and plural were all levelled away in Old Irish; e. g. 3<sup>rd</sup> sing. *ro geguin* 'vulneravit, trucidavit' for *\*gegon-e* (Skr. *jaghān-a*) 2<sup>nd</sup> pl. *ro gegnaid* for *\*gegon-* (Skr. *jaghñā*). But the original middle shows in some forms the weak stem proper to it; e. g. *ro gēnar* 'natus sum' for *\*ge-gn-*, like Skr. *ja-jñ-ē*.

The vocalism of some forms is exceptional: *ro tāich* beside *techim* 'I flee', *ro rāith* beside *rethim* 'I run', cp. *ro scaich* beside *scuchim*, *ro gāid* beside *gudim*. Except *ro mīdar*, all unreduplicated preterites with roots having a single initial consonant show *-ā-*.

§ 881. One thing yet remains to say of the personal endings. The 1<sup>st</sup> and 3<sup>rd</sup> plural have a deponent formation (-*ammar* and -*atar*).

### Germanic.

§ 882. I first give once again the forms cited in § 846, and compared with perfects from other languages. Goth. *ga-tar* 'he tore up, destroyed' -*tērun*, O.H.G. *zar zārun*. Goth. *man* 'remembers, wishes' *munun*, O.Icel. *man muno*. Goth. *gam* 'came' *gēmun*, O.H.G. *quam quāmun*. Goth. *ga-þars* 'dried up' -*þaursun*. Goth. *ga-dars* 'dares' -*daursun*, O.H.G. *gi-tar-turrun*. Goth. *varþ* 'became' *vaúrþun*, O.H.G. *ward wurtun*. Goth. *hlaf* 'stole' *hlēfun*. Goth. *band* 'bound' *bundun*, O.H.G. *bant buntun*. Goth. *gataih* 'showed, recounted' -*tathun*, O.H.G. *zēh zigun*. Goth. *bait* 'bit' *bitun*, O.H.G. *beiz bigzun*. Goth. *laihþ* 'lent' *laihoun*, O.H.G. *leh lioun*. O.H.G. *sēh* 'strained, filtered' *sigun*. Goth. *kāus* 'tried, chose' *kusun*, O.H.G. *kōs kurun*. Goth. *ana-báuþ* 'bade, commanded' -*budun*, O.H.G. *bōt butun*. Goth. *bāug* 'bent' *bugun*, O.H.G. *boug bugun*. O.H.G. *rōz* 'wept' *ruzzun*. O.Icel. *svaf* 'slept' *svǫfo*. Goth. *gavag* 'moved' -*vēgun*, O.H.G. *wag wāgun*. Goth. *sat* 'sat' *sētun*, O.H.G. *saz sāzun*. Goth. *sai-sō* 'sowed' *sai-sōun*. Goth. *skat-skáiþ* 'separated, parted' *skat-skáidun*. Goth. *stai-staut* 'pushed, knocked' *stai-stáutun*.

The Idg. difference in accent of singular and plural (cf. Skr. *vēda* : *vidmá*, *cakāra* : *cakṛmá*) has left its traces in the final consonants of the root in O.H.G. *ward* : *wurtun*, *zēh* : *zigun*, *kōs* : *kurun* and the like (I § 530 p. 386 f., § 580 p. 434).

Whether the ending of the 1<sup>st</sup> pl. indic. -*um* represents Idg. -*ṃme*, or is due to the analogy of 3<sup>rd</sup> pl. -*un* and was originally Idg. -*me* or -*a-me*, is doubtful; see § 844 p. 385 f.

Besides the indic. perf., the Optative is seen in Germanic; e. g. 1<sup>st</sup> pl. Goth. *vit-ei-ma* O.H.G. *wizz-t-mēs*, Goth. *skatskaid-*



-*ei-ma*. Then there is one isolated Conjunctive form, used as an imperative, Goth. *ōgs* 'fear thou' (beside indic. *ōg* 'he fears'), and a few substantives based upon the Participle, as Goth. *bēr-us-jōs* 'parents' and A.S. *ēzesa ēzsa* O.Sax. *ēcso* 'owner' (II § 136 p. 445, Johansson Beitr. zur griech. Sprachkunde, 134).

The Germanic Perfect falls into two divisions, (I) Reduplicated and (II) Unreduplicated.

§ 883. (I) The reduplicating syllable of the Idg. reduplicated perfect is kept clear and true in Gothic; but this only by roots which as far as Germanic is concerned do not belong to the *e*-series.<sup>1)</sup>

All Gothic reduplicating syllables have *ai*, which is regular for *i* = Idg. *e* before *h* and *r*; e. g. *hai-hait* *rai-rōþ* (I § 67 p. 58). Beginning with those cases where it was regular, *ai* spread to the rest by analogy; hence *skai-skaiþ*; which regularly would be *\*ski-skaiþ*. As regards Johansson's view that Goth. *ai* is to be read as a long vowel, see Addendum to page 17.

The fact that the analogy of *ai* really did so act is clear from the new forms *ai-duk* (= O.Icel. *jök* § 885) beside *auka* 'I increase', and *af-aiðik* beside *af-ðika* 'I deny, refuse' (§ 473 p. 19).

The root syllable of these reduplicated forms is always the same in the plural as in the singular; the strong grade of the singular has become general. *skai-skaiþ* *skai-skaidun*: Skr. *ci-chēda ci-chidur*, √ *skhajit- skhajid-*. *stai-staut* *stai-stautun*: Skr. *tu-tōda tu-tudūr*, √ (s) *taud-*. *fai-flōk* 'he lamented' *fai-flōkun*: Gr. Dor. *πέ-πλāγε*, pres. *flōka* Class II *A* in contrast with Lith. *plakù* Class II *B*, √ *plāq- plāg-* (§ 534 p. 96). *sai-sō* 'sowed' *sai-sōun*: Gr. Dor. *ἀφείωκα*, pres. *saia* for *\*sē-īō*, cp. Gr. *ῖ-η-μι*, √ *sē- sō-*; *saisōun*, like *lailōun* 'they abused',

1) "As far as Germanic is concerned", because the analogy of these attracted into the same group some others which in the parent language did have *e*-vocalism; for instance, Goth. *vaiwald* beside *valda* 'I rule' for *\*valdhō* from √ *vel-*.

also shows itself not to be in its original form by the ending *-un*, taken over from the stems which had initial consonant. *lat-lōt* 'let' *lai-lōtun*, pres. *lēta*, √ *lēd-* (§ 521 p. 85).

§ 884. This Gothic reduplicated Perfect was also formed from extended roots, or from presents with some stem-characteristic (cp. §§ 847, 889, 891).

*vai-vō* 'blew': Skr. *va-vāu* from *u-ē* 'to blow', pres. *vaia* = *uē-iō* (§ 587 p. 128, § 735 p. 262).

*fat-fah* 'grasped' *fat-fahun* (cp. O.H.G. *fiang fiangun* § 885) beside pres. *faha* (O.H.G. *fāhu*) for *\*fawəχō*, probably a nasal present from √ *pak-* (§ 632 p. 168, § 634 p. 171).

*fat-falp* 'folded' *fat-falpun* beside pres. *falpa* ground-form *\*pġ-tō* (§ 680 p. 213); *hat-hald* 'tended, pastured' beside pres. *halda* ground-form *\*kġ-tō* (§ 585 p. 215). *vai-vald* 'he ruled' *vai-valdun* beside pres. *valda* ground-form *\*uġ-dhō* (§ 689 p. 219); *ga-rairōþ* 'considered' *-rairōdun* beside pres. *ga-rēda* ground-form *\*rē-dhō* (§ 689 p. 220). *sat-salt* 'he salted' beside pres. *sal-ta* = Lat. *sallō* for *\*sal-dō* (§ 690 p. 221).

§ 885. In West Germanic and Norse there are only a few distinct traces of the reduplicated type. The most important forms for our purpose are the following.

First some Anglo-Saxon forms, as *reo-rd* = Goth. *rat-rōþ*, (*leo-rt* = *lat-lōt*), *leo-lc* 'he leapt' = *lat-lāik* with long vowel lost in the final syllable, as it is in *hwylc* 'which?' *swylc* 'such' = Goth. *hvileiks* *svaleiks*.

More uncertain are some forms which Bopp regarded as reduplicated. O.H.G. Alemann. 3<sup>rd</sup> pl. ind. *pleruzzun* 3<sup>rd</sup> sing. opt. *ca-pleruzzi* beside pres. *bluozu* 'I offer', 3<sup>rd</sup> sing. ind. *ki-skrerot* beside pres. *scrōtu* 'I cut' (= Goth. *\*skrāuda*), 3<sup>rd</sup> sing. ind. *steroz* beside pres. *stōzu* 'I knock, push'. According to Holz (Urgermanisches geschlossenes *ē*, p. 28) *\*ske-skrōd-* became *\*skre-skrōd-* *\*skre-rōd-*, *\*be-blōt-* became *\*ble-blōt-* *\*ble-lōt-* *\*blerōt-*; this, he says, produced a perfect type with *r*, whence *\*sterōt-* instead of *\*ste-stōt-*. A different view is taken by Zarncke, P.-B. Beitr. xv 350 ff.; but his is more dubious even than that of Holz.

O. Icel. *sera* 'I sowed' for \**se-zō* = Goth. *sai-sō*; *sera* is inflected as a weak preterite in the singular (as is Goth. 2<sup>nd</sup> sing. *saisōst* perhaps from \**saisōs*); in the plural, *serom*. O. Icel. *jök* 'I increased' (pl. *jökom*) for \**eauka* = Goth. *ai-duk* (§ 883 p. 430).

In these dialects we usually find, parallel to the Gothic reduplicated perfect, forms whose structure is apparently different; on which works have been brought out of late by Ljungstedt, Ottmann and Holz, whose titles are given in the footnote to page 383.<sup>1)</sup> The facts about O.H.G. are as follows:

(1) Verbs with *ou* or *ō* = Goth. *du* in the present, and verbs with present *uo* = Goth. *ō*, have, instead of the Gothic dissyllabic reduplicated stem, a monosyllabic stem with *eo*, whence *io ia ie*. *leof liof liaf lief* 'I ran' *leofun liofun* from pres. *loufu*: Goth. *hat-hlāup hat-hlāupun*. *stioz* 'I pushed, knocked' *stiozun* from pres. *stōzu*: Goth. *stat-stāt stai-stātun*. (*h*)*riof* 'I called' (*h*)*riofun* from *hruofu*.

(2) The others, instead of the Gothic dissyllabic reduplicated stem, show a monosyllabic stem with *ē*, which becomes *ea ia ie* (I § 75 Rem. 2 p. 65):

(a) *hiaz* 'I was called' *hiazun* from pres. *heizu*: Goth. *hat-hait hat-haitun*. *sciad* 'separated' from *sceidu*: Goth. *skai-skaiþ*.

(b) *fiald* 'folded' *fialdun* from pres. *faldu*: Goth. *fat-falþ fat-falþun*. *hialt* 'held' from *haltu*: Goth. *hat-hald*. *wialt* 'rules' from *waltu*: Goth. *vai-vald*. *sialz* 'salted' from *salzu*: Goth. *sai-salt*. *fiang* 'seized' *fiangun* from *fāhu*: Goth. *fat-fāh fat-fāhun*; the difference between the Gothic and Old High German, *h* : *g*, is explained by remembering that in accordance with the old difference in accent, the singular came to have *h* and the plural *g* (cp. § 882 p. 429). *fial* 'fell' from *fallu* for \**fal-nō*, *wial* 'bubbled, boiled'

1) On Holz' attempt, see Holthausen, *Anzeig. deutsch. Altert.*, 1891, p. 187; and Sievers, *Paul-Braune-Sievers Beitr.*, xvi 252 ff. Ljungstedt's work is not accessible to me; his views are only known to me by reviews and citations.

*wialun* from *wallu* for \**yal-nō*, see § 614 p. 151; *l* for *ll* because a long vowel precedes. *spian* 'I stretched' *spianun* from *spa-nnu*, see § 654 p. 188; *n* for *nn* has the same reason. *iar* 'ploughed' *iarun* (part. *gi-aran*) from *er-iu* 'I plough' (the perf. of Goth. *arja* is not found), see § 723 p. 253.

(c) *liaz* 'I let' *liazun* from *lazu*: Goth. *lai-lōt lai-lōtun*. *riat* 'I advised' from *rātu*: Goth. *rat-rōþ*. *sliaf* 'slept' from *slāfu* contrasted with Goth. *sai-zlēp sai-slēp* pres. *slēpa*.

Remark. *sāu* 'I sow' passed over to the weak conjugation; hence pret. *sāta* (part. *gi-sait*), not like Goth. *sai-sō*. See Braune, Ahd. Gr.<sup>2</sup> § 351 Anm. 3 p. 249, § 359 Anm. 3 p. 254.

There can hardly be a shadow of doubt that some at least of these perfect formations, which are repeated to a great extent in the other West Germanic dialects and in Norse, have come from reduplicated forms such as we see in Gothic. But how this happened has not yet been clearly made out. The *eo*-preterite has been best explained, if explained by the word. It is probable that the type of this group arose from verbs which began with *au-*: 1<sup>st</sup> sing. \**é-auka* (Goth. *aiđuk*) became \**éōka* \**eoka* (O. Icel. *jōk*); then on the analogy of \**eoka* beside pres. \**aukō* was formed beside \**hlaupō* the perf. \**hleopa* 'I run' (O.H.G. *leof* O. Icel. *hljōp*), and so forth.

Ljungstedt regards this whole perfect class as being composed partly of Idg. reduplicated perfects, and partly of aorists and imperfects; for instance, he calls O. Icel. *kom* 'I came' (beside *kvam* Goth. *gam*) an original aorist.

§ 886. Perhaps the West-Germ. preterite of *√ dhē-* 'to place, do' is a reduplicated perfect: O.H.G. indic. 1<sup>st</sup> and 3<sup>rd</sup> sing. *teta* (2<sup>nd</sup> sing. *tāti*) pl. *tatum tātut tātun* opt. 1<sup>st</sup> and 3<sup>rd</sup> sing. *tāti*; O.Sax. 1<sup>st</sup> and 3<sup>rd</sup> sing. *deda* 2<sup>nd</sup> sing. *dedōs* pl. *dedun* and *dādun* opt. *dedi* and *dādi*; A.S. *dyde dydes(t)* etc. like *nerede*, but pl. also *dædon*.

It is not clear whether this preterite is to be connected with the Idg. perfect (Skr. *dadhāu*), or the Idg. imperfect (Skr. *ádadhāt* Gr. *ἐτίθη*, see § 539 p. 99, § 545 p. 103), or both. In any case, however, there can be no comparing of the

1<sup>st</sup> and 3<sup>rd</sup> sing. O.H.G. *teta* O. Sax. *deda* and the Skr. middle form *dadhē*.

The *y* of A.S. *dyde* is difficult. Sievers deduces an opt. \**du-d-ī* (Paul-Braune-Sievers' Beitr., xvi 236). This would bring us to a weak preterite from a stem *du-*, as to which consult Wilmanns, Zeitschr. für d. Alt., xxxiii 425.

\**dēd-* in the weak forms seems to be connected with *-dēdum* in the Gothic weak preterite. To explain how it got there, the following theory is less strained than others. We may suppose that Germanic once had a present answering to the Skr. *dā-dh-a-ti* Lith. *de-d-ù* (§ 540 p. 101, § 561 p. 110); then *tatum* was an ad-formate of *gabum* etc. The suggestions of Johansson (Kuhn's Ztschr. xxx 550) and Holz (as cited, 44) are unsatisfactory.

Remark. Collitz (Am. Journ. Phil. ix 51) and Johansson (as cited, p. 549) see in Goth. *iddja* 'I went' a 1<sup>st</sup> sing. perf. mid. = Skr. \**īy-é* (cp. act. 3<sup>rd</sup> pl. *īy-úr*). But there never was any pr. Idg. perfect stem *īy-*, which fact alone wrecks the hypothesis; Skr. *īy-úr* is an Aryan formation; see § 851 p. 399. On *iddja*, see § 478 p. 26, § 587 p. 128, § 592 p. 133.

§ 887. (II) We now turn to the Second chief class of Germanic Perfects, those which show no reduplication in any Germanic dialect. This class falls into two sections; (A) those which have no vowel variation within their own perfect system, as Goth. *skōf skōbun* opt. 1<sup>st</sup> pl. *skōbeima*; and (B) those which have, as Goth. *man munun muneima*, *gam gēmun gēmeima*.

A part of these forms, what are called the Preterite-Presents, kept hold of the proethnic function of the perfect to express the present perfect, and did not become a historic tense; as Goth. *ōg* 'I fear' *áiħ* 'I have' *váiit* 'I know' *man* 'I think'. In this they are like Lat. *meminī* and *ōdī*. As they were isolated in use, so they were exceptional in form. (1) In the Indicative, roots of the *e*-series, ending in a single consonant, lacked the *ē*-form; cp. Goth. *man munun* or *skal skulun* as contrasted with *gam* 'I came' *gēmun*, *stal* 'I stole' *stēlun*. (2) The present meaning demanded an infinitive and participle. The place of these was filled by thematic forms of present Class II, which in verbs that retained ablaut were taken from Class II B, e. g. *áiħan* *áiħands*

beside *áiħ* 'I have', *vitán vitands* beside *vdít*. Of the forms taken from Class II *B*, some few had come down from pre-Germanic times; as *vitán munan skulan ga-daúršan* (§ 532 p. 93 f.). The adj. *un-agands* 'fearless' is related to *ōg* 'I fear' as *us-anands* 'exhaling' to *us-ōn* 'I exhaled'. (3) A past tense was needed for them. For this the 'Weak Preterite' was used, as Goth. *vissa* O.H.G. *wissa wessa* beside *vāit weiz*, Goth. *ga-daúrsta* O.H.G. *gi-torsta* beside *ga-dars gi-tar*. If, as has been assumed, O.H.G. *wiss-um -ut -un* belong to the *s*-aorist, they must be related to *weiz* just as *ἤσμεν ἤστε ἤσαν ἴσαν* to *οἶδα* (§ 821 p. 358, § 827 p. 365, § 863 p. 411).

With the Preterite-Presents based upon the Idg. Perfect were associated a variety of Present stems:

Three or four *neþ*-classes: Goth. *kun-nu-m* O.H.G. *un-nu-m* O.Sax. *\*dur-nu-m*, to which were added, by analogy of the Perfect singular, the forms *kann an darn*; see § 646 p. 183 f.

Then Goth. O.H.G. *mag* 'I can, am able' pl. *magun* is probably a transformation of a present of Class II *B* *\*mazō* = O.C.Sl. *moga* 'I can' (§ 523 p. 87); it belongs to the root of Gr. *μηχος μηχανή* Dor. *μᾶχαρά*, and must have been an orig. perfect *\*mōg* *\*mōgun*. Its transformation into a present is easily understood from its meaning. Beside *magan magands* were formed *mag magun* following *áiħ áigun* beside *áihan áihands*, and *ga-mōt -mōtun* beside *-mōtan -mōtands*.<sup>1)</sup> The form *muþ-*, found in West-Germ. beside *maþ-*, e. g. O.H.G. *mugun* beside *magun*, is due to later re-formation, as Osthoff shows (P.-B. Beitr. xv 213 ff.).

Remark. Osthoff (*op. cit.* pp. 217 f.) holds *mag* to be a genuine perfect, and assumes that *\*mōg magun* levelled out the strong stem. This view is contradicted by *ōg ōgun* (beside *un-agands*) *áiħ áigun* (beside Skr. *ī-*) *skōf skōbun* (beside *skaban*) and so forth, which all show levelling in favour of the singular stem.

1) Similarly, in the Rhine-Frankish dialect of Mod.H.G. the identity of inflexion in *ich brauch(e) wir brauche(n)* inf. *brauche(n)* pret. *braucht(e)* and *ich muss wir müsse(n)* inf. *musse(n)* pret. *musst(e)* led to the coining of a 3<sup>rd</sup> sing. *er bräuch*, instead of *er braucht*, parallel to *er muss*.

§ 888. Group II A. The unreduplicated perfects which had no gradation, with the single exception of *mag* (for which see above), show *ai* or *ō* in the root.

*ai* only in Goth. *áiħ* 'has' pl. *áigun* (by levelling also *áig* and *áihun*) O.H.G. pl. *eigun* (from the participial stem *\*aiǵ-us-* comes A.S. *ēgesa ēgsa* O.Sax. *ēcso*, see § 882 p. 430): Skr. mid *īś-ē*, see § 848 p. 391. As this Sanskrit form shews, Germanic has levelled in favour of the singular vocalism, *áigun* instead of *\*iǵun* or *\*igun*. That *áiħ* has no reduplication (as *af-aiáiħ* *stai-skáiþ* etc. have, §§ 883 ff.) shows that this was lacking in pre-Germanic times, and makes the immediate connexion with the Aryan verb certain. Inf. *áihan* part. *áihands* are Germanic re-formates (cp. the thematic Skr. *īś-a-tē* Avest. *is-a-itē*, § 854 p. 404).

All other examples have *ō*, which is the vowel of the singular. These perfects, if we look at Germanic alone, all belong to roots of an *a-* or *o-*series. Goth. *skōf* 'scraped' *skōbun* O.H.G. *scuob scuobun* O.Icel. *skōf skōfo* from pres. *skaba scabu skef*: Lat. *scābi* from *scabō*. Goth. *hōf* 'raised' *hōfun* (instead of *\*hōbun*) O.H.G. *huob* (instead of *\*huof*) *huobun* from pres. *hafja heff(i)u*: Lat. *capiō*. O.H.G. *int-suab* 'I marked' -*suabun* from pres. *int-seff(i)u*: Lat. *sapiō*. Goth. *skōþ* 'I hurt' *skōþun* from pres. *skapja*: cp. Gr. *ἀ-σκηθής* 'scatheless' (*η* = *α*). Goth. *us-ōn* 'exhaled' -*ōnun* from pres. *us-ana*: Skr. *āna*, cp. Gr. *ἄνεμο-ς* 'wind' *ἡνεμόεις* 'windy' (*η* for *α*). O. Icel. *ōk* 'drove' *ōko* beside pres. *ek*: Gr. *ἦχε ἥγμαi* (*η* for *α*) Skr. *āja*. O.H.G. *buoh* 'baked' *buohhun* from pres. *bahhu* (Class II B) beside *backu* (for *\*bak-nō* Class XIII § 614 p. 152): Gr. *πέφωγμαi* pres. *φώγω* (Class II A). Pret.-pres. Goth. *ōg* 'fears' *ōgun* (2<sup>nd</sup> sing. conj. *ōgs* § 882 p. 430) beside *un-agands* 'fearless': O.Ir. -*agur* 'fear' may also have been originally perfect.

A certain number of perfects of this group come from roots of the *e-*series. Goth. *fōr* 'drove' *fōrun* O.H.G. *fuor fuorun* from *fara faru*, ✓ *per-* Gr. *περάω* 'I pass through'. Goth. *mōl* 'I ground' O.H.G. *muol* from *mala malu*, ✓ *mel-* O.Ir. *melim*

O.C.Sl. *melja* beside Armen. *malem* Lat. *molō* Cymr. *malaf* (§ 523 p. 86). Goth. *grōf* 'dug' O.H.G. *gruob* from *graba grabu*, √ *ghrebh-* O.C.Sl. *grebaq.* Goth. *slōh* 'struck' *slōhun* (instead of \**slōgun*) O.H.G. *sluoh* (also *sluog*) *sluogun* from *slaha slahu*, √ *slek- sleg-* O.Ir. *sligim.* O.H.G. *gi-wuog* 'mentioned' from *gi-wahann(i)u* (§ 623 p. 161), √ *ueq-* Gr. *ῥπος* 'word'. In most, if not all, of the Verbs of this sort, the first step must have been for the present to get an *a*, and the next to form a perfect with *o* on the analogy of *skōf skōhun* from *skaba*. See § 509, page 75. There is no need to suppose that *fōr* and *mōl* were formed thus in connexion with some present, if we suppose that they date from a period when this whole class of perfects still had the weak stem in the plural of the indicative, and so forth. At such a period, \**far-* and \**mal-* = \**pf-* and \**mĭ-* may have been the weak perfect stem. If so, then the sing. *fōr* and *mōl* were formed beside them just as in Greek *μέμλε* took the place of \**μεμολε* on the analogy of forms with *με-μαλ-* (§ 859 p. 409); a step further, and we have *fōrun* and *mōlun* following the singular.

§ 889. Some perfects of this class are based upon an extended root or a present stem which already has some characteristic (cp. §§ 847, 884, 891). O.H.G. *spuon* 'I enticed' from *spanu* (§ 614 p. 152); Mod.H.G. *būk* instead of Mid.H.G. *buoch* O.H.G. *buoh* following *backe* O.H.G. *backu* for \**bak-nō* (§ 888 p. 436). Goth. *vōhs* O.H.G. *wuohs* 'I grew' from *vah-s-ja wahsu* (§ 657 p. 192). O.H.G. *wuosc* 'I washed' from *wascu* probably for \**uat-skō* (§ 676 p. 209). Goth. *stōþ* O.H.G. *-stuot stuont* 'stood' from *sta-nda sta-ntu* 'I stand' (§ 634 p. 172, § 685 p. 216). O.H.G. *luod* from (h)*la-du* A.S. *hla-de* 'I load' (§ 689 p. 220).

§ 890. Group II B. Perfects which ever since proethnic Germanic have had vowel gradation in their root, but no reduplication, were formed from roots of the *e*-series. We divide them into two classes, (1) those in which the ablaut of the preterite present agrees with that in other tenses, (2) those



in which it does not. Most of the following examples have come down from the parent language, as we have seen above.

(1) Goth. *bait* 'I bit' *bitum* opt. 1<sup>st</sup> pl. *biteima* O.H.G. *beiz* *bizzun* *bizzim* O.Icel. *beit* *bito* *bitem*. Pret.-pres. Goth. *vait* 'I know' *vitum* O.H.G. *weiz* *wizzun* O.Icel. *veit* *vito*. Goth. *-bauþ* 'offered' *-budun* O.H.G. *bōt* *butum* O.Icel. *baud* *buðo*. Pret.-pres. Goth. *dauþ* 'valet' O.H.G. *toug* *tugun*.

Goth. *band* 'I bound' *bundun* O.H.G. *bant* *buntun* O.Icel. *batt* *bundo*. Goth. *varþ* 'I became' *waúrþun* O.H.G. *ward* *wurtun* O.Icel. *varð* *urðo* 'I'). Pret.-pres. Goth. *ga-dars* 'dares' *-dairsun* O.H.G. *gi-tar* *-turrun*.

(2 a) Perfects with Preterite meaning. Goth. *bar* 'carried' *bērun* O.H.G. *bar* *bārun* O.Icel. *bar* *bǫro* (*bāru*). Goth. *gam* 'came' *gēmum* O.H.G. *quam* *quāmun* O.Icel. *kvam* *kvǫmo* (*kvāmu*). Goth. *sat* 'I sat' *sētun* O.H.G. *saz* *sāzun* O.Icel. *sat* *sǫto* (*sātu*). Goth. *brak* 'I broke' *brēkun* O.H.G. *brah* *brāhhun*. Goth. *frah* 'asked' *frēhum* O.Icel. *frā* *frǫgo* (*frāgu*). There are re-formates following this class; one is Goth. *baþ* 'I bade' *bēdun* O.H.G. *bat* *bātun* from pres. *biðja* *bitt(ō)u*, ✓ *bhejdh-* (§ 722 p. 253).

(b) Preterite-presents. Goth. *skal* 'shall' *skulun* O.H.G. *scal* *sculun* O.Icel. *skal* *skolo*. Goth. *man* 'thinks' *munun* O.Icel. *man* *muno*. Goth. *ga-nah* 'is enough' *\*-nauhun* O.H.G. *gi-nah* A.S. pl. *ge-nuzon* (probably akin to O.C.Sl. *nesq* 'I carry', ✓ *nek-*).

§ 891. Numerous perfects of this class are made from roots already extended, or from characterised present stems (cp. §§ 847, 884, 889).

With *n*-suffix (§ 614 p. 151 f.). O.H.G. *spurnun* 'they trod, kicked' (sing. *\*sparn*) A.S. *spearn* *spurnon* from *spur-nu*. O.Sax. *fragn* 'I asked' *frugnon* A.S. *frægn* *frugnon* (cp. 1<sup>st</sup> sing. *ga-fregin* in the Prayer of Wessobrunnen) from *frig-nu* *friz-*

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1) Of the same sort is Goth. *þrask* 'I threshed' *þruskun* O.H.G. *draak* *druskun*, which probably contains the present suffix *-sko-*. Cp. § 676 p. 209, and § 891.

-ne Goth. *frath-na*. Goth. *skáin* 'appeared' *skinun* O.H.G. *scēin* *scinun* from *skei-na* *scī-nu*; so too O.H.G. *swein* 'disappeared' from *swī-nu* etc. O.H.G. *qual(l)* 'welled up' *quullun* from *quillu* for *\*quel-nō*; so also *hal(l)* 'sounded, rang out' *hullun* from *hillu* for *\*hel-nō*, and other like forms.

With Nasal Infix (§ 634 pp. 170 ff.). Goth. *sagg* 'sank' *suggun* O.H.G. *sank* *sunkun* from *sigga* *sinku*, √ *seig-* *seig-*. Goth. *stagg* 'struck, knocked' *stuggun* from *stigga*, √ *steig-*. O.H.G. *chlamb* 'climbed' *chlumbun* from *chlimbu*, from *glei-p-*. O.H.G. *sprang* 'sprang' *sprungun* from *springu*, √ *spergh-*. O.H.G. *scrant* 'burst' *scruntun* from *scrintu*, *sger-dh-*. — Goth. *fanþ* 'found' *funþun* O.H.G. *fand* *funtun* from *finþa* *findu*, as I conjecture from √ *pet-*. — Goth. *vand* 'turned' *vundun* O.H.G. *want* *wuntun* from *vinda* *wintu*, from *uei-t-*. The Goth. *þeiha* O.H.G. *dihu* 'I thrive', for *\*þerəχð*, which is connected with Lith. *tenkù* inf. *tėk-ti* (√ *teq-*), had originally a perf. *\*þarəχ* *\*þurəχun*, which is now represented only by A.S. *ðunzon* (cp. part. *ȝe-ðunzen* O.Sax. *gi-thungan*); the regular phonetic change of the present led to the formation of the perf. forms Goth. *þáih* O.H.G. *dēh* following *stáig* beside *steiga* etc. (I § 67 Rem. 2 p. 57).

From Present stems in *-nnō* for *-ny-ō* and in *-innō* for *-eny-ō* (§ 654 pp. 187 f.). Goth. *du-gann* 'began' *-gunnun* O.H.G. *bi-gan* *-gunnun* from *du-ginna* *bi-ginnu* = Skr. *hī-nva-ti*. Goth. *rann* 'ran' *runnun* O.H.G. *ran* *runnun* from *rinna* *rinnu* = Skr. *ri-nvāmi* Idg. *\*ri-ny-ō* or = Idg. *\*r-eny-ō*. O.H.G. *tran* 'I separated myself' *trunnun* beside *trinnu* = Idg. *\*dr-eny-ō*.

Root with *s*-extension (§ 664 p. 197). Goth. *-þans* 'I pulled' *-þunsun* O.H.G. *dans* *dunsun* from *þin-sa* *din-su*, √ *ten-*. O.H.G. *bal(l)* 'barked' *bullun* from *billu* = *\*bhel-sō*. Goth. *fra-láus* 'I lost' *-lusun* O.H.G. *vir-lōs* *-lurun* from *-liu-sa* *-liu-su* 'I lose'.

From the *sk*-Present O.H.G. *ir-lisku* 'I quench', the perf. *ir-lask* *\*-luskun* (§ 676 p. 208).

Root with *t*-extension (§ 685 p. 215 f.). O.H.G. *flaht*

'plaited' *fluhtun* from *flīh-tu*; *faht* 'fought' *fuhtun* from *fiht-tu*). Goth. *ga-vaþ* 'bound' -*vēdun* O.H.G. *wat wātun* from *ga-vida witu*, ground-form doubtless \**wi-tō*. Compare the perf. Goth. *vand*, which belongs to a *t*-present with nasal infix, p. 439.

Root with *dh*-extension (§ 698 p. 225). O.H.G. *bratt(t)* 'I swung, jerked' *bruttun* A.S. *bræzd bruzdon* from *brittu brez-de*. Also with internal nasal O.H.G. *scrant* from *sqer-dh-*, p. 439.

Root with *d*-extension (§ 699 p. 225 f.). Goth. *gaut* 'poured' *gutun* O.H.G. *gōz guzzun* from *giu-ta giu-zu*. O.H.G. *flōz* 'flowed' *fluzzun* from *flīu-zu*. Goth. *svalt* 'was burnt up' *svultun* O.H.G. *swalz swulzun* from *swil-ta swil-zu*.

§ 892. Levelling between perfect singular and plural as we see it in Mod.H.G. *biss* 'I bit' following *bissen*, *quoll* 'welled up' following *quollen*, *banden* following *band* 'I bound', which is also seen here and there in Middle H.G., is comparatively rare in the old Germanic dialects; examples are A.S. *nōm nōmon* contrasted with O.H.G. *nam nāmun*<sup>2</sup>), O.Icel. *ōf* *ōfo* instead of *vaf* *ōfo* = O.H.G. *wab wābun* (O.Icel. *vefa* O.H.G. *weban* 'to weave').

§ 893. We now have to examine in Group II (A) and (B) those forms which lack the reduplicating syllable.

The following perfects were always unreduplicated.

(1) Weak forms like Goth. *sētun mētun qēmun*; see § 848. 3 p. 393. The reason why they drove out of the field forms of the same type as Skr. *pa-pt-ūr sēdūr* = \**sa-zd-ur*, was that in course of phonetic change the unity of the tense-system had been considerably destroyed; thus the reduplicated 3<sup>rd</sup> pl. of the Goth. *mitan* must needs become \**mintun* (sing. *mat*), from Goth. *saihvān* the form must be \**sisk(y)un* (sing. *sahv*), from Goth. *qīpan* it must be \**qaihtun* (sing. *qap*), from O.H.G. *jesan*

1) Mid.H.G. pl. *vlāhten vāhten*, and even in O.H.G. *brāstun*, beside an earlier form *brustun* from *bristu* 'I break'. For the change in the perf. plural see Osthoff, Perf. 119.

2) *nōmon* is regular, and drew the singular under the influence of *fōr fōron*.

it must be \**jīrun* (sing. *jas*), and from O.H.G. *lesen* it would be \**lillun* (sing. *las*). Thus the same difficulty had to be met here as was met in Sanskrit by the spread of the type *sēd-yēm-* (§ 852 p. 401).

(2) The pret.-pres. Goth. *đih* and probably also *váiſt* which answers to Skr. *vēda* and Gr. *oidē*, see § 848 p. 391, § 888 p. 436.

Further, the following may be regarded as perfect forms originally unreduplicate:

(3) Goth. *fr-ēt -ētun* O.H.G. *az* O.Icel. *at*, and

(4) O.Icel. *ök öko*, Goth. *ōn* and *ōg*; see § 848. 3 and 4, pp. 393 f.

As regards the Preterite-Presents in particular, we must remember that the 3<sup>rd</sup> pl. Goth. *munun* and *ga-daur̥san* were in all probability injunctive, as we may regard *vitun* (§ 508 p. 74 f.). The two former may not have been associated in one tense with *man* and *ga-dars* until the reduplication was quite lost in the singular.

If, again, we remember that among forms like *skōf* (Lat. *scabi*) there may very well be some which were unreduplicate when they became part of the Germanic stock, it cannot seem strange that Germanic has lost its reduplication to such a great extent. Such forms as the perfect of *hāitan* or *valdan* were exempted from the change, and kept their reduplication, simply because their present and perfect had the same root-vowels, and without the reduplication there would be no sufficient difference between them.

As in the Italic perfect system we find preterite forms of our Present Class II *B* (e. g. Lat. *fid-i-t*, § 867. 5 p. 414), so we do in West Germanic. From this group we cite the 2<sup>nd</sup> sing. like O.H.G. *bizzi* A.S. *bite* 'thou didst bite' (Skr. *á-bhid-a-s* Lat. *fid-i-t*), O.H.G. *zigi* A.S. *tize* 'thou didst draw' (Skr. *á-diś-a-s*), see § 532 p. 928; further perhaps those like O.H.G. *māzi* A.S. *māte* 'thou measuredst' (Gr. *ἐ-μῆδ-ε-ο*), see § 514 p. 81. Such forms as these were at first quite rare. In proethnic W.Germ. they had become identical with the 2<sup>nd</sup> sing.

optative, whose ending \*-īz became -ī, e. g. A.S. *bite* opt. for \**bitīz*. And by analogy of these forms, which legitimately had both optative and indicative meanings, a large number of others, which originally were optative only and nothing more, took the indicative meaning too. An example is O.H.G. *fiangi* A.S. *fenze*. But in O.H.G. and O.Sax. the 2<sup>nd</sup> sing. opt. and indic. were differentiated afresh, -ī being restricted to the indicative, and in the optative the ending -īs (-īst), used since protoethnic Germanic beside \*-īz, being made proper ending: O.H.G. indic. *bizzi* opt. *bizziis(t)*, but A.S. *bite* opt. and indic. both. The reason why the old forms in -t (-þ) preserved in Gothic and Norse, such as Goth. *bāist* 'didst bite' *gaft* 'gavest', were driven out of the West Germanic speech, is doubtless chiefly this, — that the stem-final consonant which preceded the personal ending was so often changed, the form thus becoming isolated (cp. Gr. *πέποιθα* etc. with -ας instead of -θα).

This West-Germ. 2<sup>nd</sup> sing. pret. seems to belong entirely to unreduplicated present stems. (It seems impossible to prove that any old reduplicated forms like Lat. *te-tig-i-t* Gr. *τε-τάθ-ο-ντο* are included amongst O.H.G. *fiangi hiagi* and that type.) But since they were absorbed into the Perfect system in West-Germanic, not before, we have no right to assume that they have at all aided in the tendency to drop the reduplicating syllable.

By analogy of the thematic present we have O.H.G. Alemann. *eigamēs*, *wāramēs* (cp. *piramēs* instead of *pirum*).

#### Balto-Slavonic.

§ 894. The inroads into the Idg. Perfect system here took a direction opposite to their course in Keltic and Germanic. The Participle survived, while the Finite Verb disappeared.

One vestige of this has been left in Slavonic; the O.C.Sl. *věd-ě* 'I know', answering to Skr. *vēda* Gr. *oīda* Goth. *vāit*, with the middle ending, which here as in Lat. (*tutud-ī*) drove

out the active. This perfect was transformed into a present, giving *věmī* 'I know' 3<sup>rd</sup> sing. *věstū*; the 2<sup>nd</sup> pl. *věste* opt. 1<sup>st</sup> pl. *vědimū* imper. *věšdī* (which keep *ě* instead of *ǣ* by levelling out all but the strong stem) may be real perfect forms; if so their present inflexion is due to the attraction of the other forms into the present system.

The Participial forms are all unreduplicated. Examples are Lith. *kiŗt-ęs* (pres. *kertū* 'I cut, strike'), O.C.Sl. *čŗitū* (pres. *čŗitā* 'I cut'): Skr. *ca-kŗt-vās-*. Lith. *dėg-ęs* (*degū* 'I burn') O.C.Sl. *žegū* (*žegā* 'I burn'): Skr. *dēh-i-vās- dēh-ūṣ-*. Lith. *dā-vęs* (*dūdu* 'I give') O.C.Sl. *da-vū* (*damī*): Skr. *da-di-vās-da-dā-vās-*. Pruss. *signā-uns* beside *signā-t* 'to bless', O.C.Sl. *žēlē-vū* beside *žēlē-ti* 'to wish', which must be compared with Gr. *ἡσυχάζω*. See II § 136 pp. 445 f. Along with O.Ir. *mīdar* Goth. *sēitun* go Lith. participles like *sēd-ęs* (from *sēdu* 'I sit, take my place'). Again, with Lat. *edī* Goth. *fr-ēt* goes the part. Lith. *ėd-ęs* O.C.Sl. *jad-ū*, and with Lith. fem. *ėd-us-i* may be compared *ěj-us-i* as being the regular descendant of Idg. *\*ǵj-us-i*.

How the first-named participles, *kiŗtęs čŗitū* and the like, lost their reduplication, cannot be made out; the losses which the Perfect System of this group of languages had undergone before the historical period begins are too great to admit of this being done. But anyhow the reason was not regular phonetic change, any more than it was in Germanic.

The agreement of the initial syllable in Lith. *ėj-ęs kiŗt-ęs* etc. and the connected present stems *ėj-o kiŗt-o* (§ 586 p. 126 f.) caused the coining beside *dė-jo stó-jo* of the part. *dėjęs stójęs*. Just so the agreement between *mīr-ęs gīm-ęs* etc. and *mīr-ė gīm-ė* (§ 593 p. 133) caused the coining beside *ėm-ė* of the partic. *ėm-ęs* instead of *\*im-ęs* (Pruss. *immus-* O.C.Sl. *imū*). Vice versâ, by analogy of participles similar to *sēd-ęs*, as *vēm-ęs* (from *vemiū* 'I vomit') *gēr-ęs* (from *geriū* 'I drink') were formed the preterites *vémė gėrė* with *ė* in the root syllable.

## PERIPHRASTIC FORMATIONS.

§ 895. We may notice here a number of periphrastic formations which were more or less intimately connected with the Verbal System. Some of them undoubtedly existed in the parent language, though at that time not one had become fused into a single word.

In the historical period, these syntactical groups, which for convenience we shall call phrases, are sometimes found in the shape of single words, as Lat. *ferē-bam* O.C.Sl. *nesē-achū*; sometimes they seem to be changing from phrase to word before our very eyes, as Skr. *datāsmi* instead of *datā asmi*; <sup>1)</sup> sometimes they were still phrases, as Lat. *factus sum*, O.H.G. *ward ginoman*. Where the position of the auxiliary is not fixed as regards the verbal noun, coming either before or after it, the phrase could not fuse into one word.

The use of a Participle for the predicate, particularly the part. pret. middle or passive, with or without the auxiliary *es-* or a synonym of it, is a usage which occurs all over the Indo-Germanic area; examples of this are Skr. *iṣṭā dēvātāḥ* 'honoured are the gods' *iṣṭā dēvātā āsan* 'honoured were the gods' (see Delbrück, Altind. Synt. 392 ff.; Spiegel, Altpers. Keilinschr. <sup>2</sup> § 68 p. 189). This predicative use of the participle was found in the parent language, especially when it was wished to lay stress on the duration of an action more than could be done by the simple forms of the finite verb. In several languages periphrases of this kind were permanent parts of some tense, where they were combined with simple forms, as Att. *γεγραμμένοι εἰσὶ* instead of *γεγράφασθαι*, Lat. *actus est* (cp. Gr. *ἦνται*), Goth. *gemēlīp ist* 'ἔγραπται'.

## § 896. Sanskrit.

Beginning with the Brahmanas, we find a periphrastic future, consisting of a nomen agentis with the suffix *-ter-* (as *datār-*

1) Compare Ital. *canterò* Fr. *chanterai* for Lat. *cantāre habeo*, Serv. *ubiū* ('I will kill') = O.C.Sl. *ubiti chošq*, Pol. *działalem -alēs* etc. 'I have built') = *działal jeśm*, — *jeś* etc.

'dator') and the verb 'to be', but only in the 1<sup>st</sup> and 2<sup>nd</sup> persons. There is a difference in usage between this and the *śjō*-future (§ 752 p. 273 f.), the latter being used only for something about to take place at a certain particular point of future time, without any reference to the intention or hope of the speaker. On the analogy of *datāsmi* instead of *datā asmi* we have 1<sup>st</sup> pl. *datāsmas* instead of *datārah smas* etc. (cp. Lat. *potis sumus*, not \**potēs sumus*), a certain token that the phrase has become a word. Middle forms are found as well, e. g. *datāsmahē*. Compare II § 122 p. 385.

Again, it is not until the historical period that we see a productive type arising out of the Periphrastic Perfect, the union of a case ending in *-ām* with *cakāra*, *āsa*, or *babhūva*, as *vidā cakāra* 'I knew', *gamayā cakāra* 'I caused to go'. The outspread of this type was due to a lack which it supplied; for there was need of a historic preterite to perfects which had a present meaning, as *vēda* 'I know' *bibhāya* 'fears'. Such a preterite was also wanted by Causals and Denominatives, which originally had no simple perfect. Lastly, they were most desirable where present and perfect were not clearly distinguished in form, as in *as-* 'to sit'. Following *vidām āsām* and the like, forms like *gamayām* and *bibhayām* were derived from the present stem (pres. *gamā-ya-ti bi-bhē-ti*).

Remark. Since in such formations *cakāra* is almost exclusively used in the older language, and *babhūva* never, Delbrück (Altind. Synt. 426 f.) infers that *-ām* is the ending of the acc. sing. of an abstract noun in *-ā* (cp. *bhidā* 'split'). The accusative must have crystallised, much as the infinitive did, before *āsa* and *babhūva* could be used with it. But there is such a striking parallel in Lat. *āre faciō* and *āre fiō* (Deeoke, *Facere* und *fieri* in ihrer Composition mit andern Verbis, Strassburg 1873), *ārē-bam*, *flā-bam*, *amā-bam* and O.C.Sl. *nesē-achū dēla-achū*, that we can hardly separate the *-ām* of Sanskrit from the cases in *-ē* or *-ā* preserved in these forms. *-ē* and *-ā* must surely be instrumental; be it observed that the forms in *-ē* can often be connected with *o*-stems (cp. III § 275 p. 176), and often with *ē*-stems like Lat. *quīē-s* Gr. *χεῖ ὀμο-κλή* (§ 578 p. 120), e. g. *plē-* in *plē-bam*. It may be that *vidām* when used with *cakāra* is accusative; but when used with *as-* or *bhū-* it may be instrumental. That *vidām* might be instr. is shown by O.C.Sl. *raķa* (III § 276 p. 179) and Skr. *pratarām* (Hirt, Idg. Forsch. I 20) and the like. Compare too the 3<sup>rd</sup> sing. imper mid. *vidām* § 968. 2.



§ 897. Armenian has several periphrastic formations; as the part. aor. (active or passive) in *-eal* coupled with *em* 'I am', e. g. *gereal ē* 'cepit, captus est' *gereal ēr* 'ceperat, captus erat' from *gerel* 'capere, to take prisoner'.

§ 898. Greek. Here we find as far back as we can go variants *γέγραπται* and *γεγραμμένος ἐστὶ* with little or no difference in meaning; and in Attic, beginning about 400 B. C., the periphrastic form became obligatory, and that in *-αται* and *-ατο* dropt out of use altogether: *γεγραμμένοι εἰσὶ* and *ἦσαν*. In the other tenses and moods *-αται* and *-ατο* had dropt in Attic long before, giving place to *-νται* and *-ντο*.

A future perfect, to express what will be completed in the future and will have enduring effects, could be formed only in the Middle and only from a few verbs; e. g. *λελείψεται βεβλήσεται* (§ 756. 6 p. 276). For the Active, and for such verbs as could not form this tense, a participle + *ἔσται* had to be used; as *κατακτονῶς ἔσται* 'he will have killed, he will be a murderer', *τετελεσμένον ἔσται* 'it will be accomplished'.

The periphrasis of the perfect by using *ἔχω* with a participle, as *κρύπτῃς ἔχω* 'I keep hidden' (Lat. *abditum habeo*), gained currency largely because certain verbs were without the simple perfect form; e. g. *ἐρασθεῖς ἔχω* (Plato) from *ἐράω* 'I love', *στήσας ἔχω* (Soph.) from *ἵστημι* 'I place' (because *ἕστηκα* is intransitive).

Desideratives in *-σίω* at first used only the participle active, as *ὀψείων* 'wishing to see'. This form, as Wackernagel makes very probable, comes from *ὀψει λύν* 'going out for to see' (Kuhn's *Zeitschr.*, xxviii 141 ff.); similarly *ξυμβασιών* 'wishing to make a bargain' from *ξύμβασις*, *ἀπαλλαξιών* 'wishing to get rid of' from *ἀπάλλαξις*. When the phrase had become a single word, the Attic added Indicative, Conjunctive, and the other parts of the conjugation. Compare Lat. *eō* with the supine, as *datum eō* (the same in Umbrian, *aseriato eest* 'observatum ibit'), from which type of sentences sprang the so-called fut. inf. passive *datum iri* (Kühner, *Ausf. Gr. der lat. Spr.*, II 534 f.).

§ 899. Italic and Keltic. In both we see the present of *bhe-* 'to become' joined with a preceding infinitival word to express the future. Lat. *arē-bō vidē-bō albē-bō, cubā-bō flā-bō plantā-bō*, (O.Lat.) *scī-bō audī-bō, ī-bō da-bō*, Falisc. *carē-fō pipā-fō*. O.Ir. *no charub* 'I will love' for *\*-bhū-ō*, elsewhere stem *\*-bhū-a-*, as in 3<sup>rd</sup> sing. *-carfa carfid*; *dolēciub* 'I will relinquish' *-lēicfea lēicfid*.

The Umbr.-Samn. Perfects like Osc. *aa-mana-ffed* 'mandavit' contain the Idg. thematic aorist *\*(e-)bhū-e-t*, see § 874 p. 422 f. The pret. of Class X *\*(e-)bhū-a-m* (§ 583 p. 123 f.) from the time of pr. Ital. made Imperfects, e. g. Lat. *arē-bam vidē-bam albē-bam plē-bam nē-bam dīcē-bam* (in O.Lat. also a future like *dīcē-bō*), *capiē-bam fāciē-bam finīē-bam, cubā-bam flā-bam plantā-bam*, (O.Lat.) *scī-bam fīnī-bam, ī-bam da-bam*, Osc. *fu-fans* 'erant'.

There is unquestionably some connexion between the first word in Latin phrases like *arē faciō* and the case-forms in *-ē* and *-a* (instr. sing.) in the first part of the O.C.Sl. imperfect, *vidē-achū dēla-achū*; there is probably a connexion with such a form as Skr. *viddm* in *vidā carati*. See § 896 Rem., § 903. Following the lead of Lat. *plantā-bō*, we may derive O.Ir. *no charub* from *\*cara-bō* (*carfid* from *\*carā-bāt(i)*, etc.). But there is no proof that *a* was long; and as the *s*-aorist *ro-char* comes from *\*carās-t* (§ 840 p. 377), it is possible that *\*carā-bō* was the pr. Keltic form. Still, that the first member was originally a nomen actionis need not be doubted whichever theory we adhere to.

§ 900. In Italic the Idg. perf. mid. passive gave place to a periphrasis with *sum* and the *to*-participle: Lat. *ortus sum, captus sum, plantatus sum, finitus sum*, Umbr. *screhto est* 'scriptum est' *screihtor sent* 'scripti sunt', Osc. *prúftúset* 'probata sunt'. How firmly rooted in the verbal system this periphrasis became is clear from two facts. (Whether the same holds for Umbro-Samnitic we cannot say; there is too great dearth of material.) (1) As the act. *fīnīvit* meant both 'he has

ended and done with', and in narrative 'he put an end to', so *finitum est*, which properly meant 'it is ended and done with', got in addition the meaning 'it was ended'; and *finitum erat* meant not only 'it was' but 'it had been ended'. Beside *praeceptum est* 'it is prescribed' we get *praeceptum fuit* 'it was prescribed'. (2) The other fact is the use of this periphrasis with deponents, where we see e. g. *cōfessus sum* made the perfect of *cōfiteor* for all purposes, and taking the same construction (II § 79 p. 219).

Just as in Attic the 3<sup>rd</sup> pl. *γεγράφται* was driven out by *γεγραμμένοι εἰσι*; so in Latin — perhaps even in proethnic Italic — the old 2<sup>nd</sup> pl. middle (cp. Skr. *bhāradhvō* Gr. *πέρεσθε*, § 1063) was superseded by a periphrasis with a participle: *\*feriminī estis* = Gr. *φερόμενοί ἐστε*, which in the historical period dropt its copula, and then the participial character of *feriminī* fell out of sight; see II § 71 p. 165. We may conjecture that *\*feriminī erātis*, *\*feriminī essētis* were also used. By and by this form buried itself in the present system, which it became part of; then its ending *-minī* became recognised for a personal suffix; and lastly we have *ferāminī ferēminī ferrēminī ferēbiminī ferēbāminī* on the analogy of *ferāmur ferēmur* etc. to *ferimur*.

Old Latin had an indeclinable inf. fut. in *-tūrum*, as *credō inimicōs meōs dictūrum* (C. Gracchus), which Postgate (Class Review, v 301) neatly explains as compounded of *dictū* and *erum* = Umbr. *erom* Osc. *ezum* 'esse'. To this crystallised infinitive *esse* was superadded, as *dixerunt omnia . . . prōcessūrum esse*; and then, the apparent analogy of *hoc prōcessūrum* (*esse*) with *hoc factum* (*esse*) caused the form to be inflected as an adjective (*o*-stem), e. g. *hanc rem prōcessūram* (*esse*) etc. Similarly, as beside Gr. *ὀψέσθω* an indic. *ὀψέτω* was formed (§ 898 p. 446), so beside *mē datūrum* (*esse*) we have e. g. *datūrus sum*.

Remark. The traditional interpretation, that *datūrus* is an extension of *dator* (cp. II § 122 p. 387), has been recognised for wrong by Kretschmer too (Kuhn's Zeitschr., xxxi 463 f.). He also connects the form with the supines in *-ū* and *-um*, but assumes the suffix to be *-ro-*, comparing Gr. *λαγρό-* from *λαγύ-*. Postgate's explanation I think the likelier.

In formation, as in meaning, there is no connexion between the verbal adj. in *-fūrus* and the abstract noun in *-fūra*; the latter has nothing future in it, and contains a secondary suffix *-rā-*. As regards Desideratives like *parturiō canturiō*, see § 768 p. 282, § 778. 1 p. 301.

Further, Latin has the periphrastic inf. fut. passive, *datum iri*, mentioned above in § 898 p. 446. The complete fusion of these two words is shown by the spelling *-tuiri* instead of *-tum iri* (see Brandt, Arch. Lat. Lexicogr. II 349 ff.; Schmalz, Fleckeisen's Jahrb., 1892, pp. 79 f.).

In Umbro-Samnitic, we have the part. perf. active (suffix *-yes-*) combined with an injunctive from *es-* 'esse' to make a future perfect, as Umbr. *dersicust* 'dixerit' Osc. *fefacust* 'fecerit'. See § 872 p. 421.

§ 901. Germanic. The Idg. perf. passive in its original meaning, that of a present perfect, used to describe what has been completed in the past and is now a finished result, has been superseded all through Germanic by the phrase made up of the part. pret. pass. + the auxiliary *bin*; e. g. Goth. *gamēliþ ist* 'ἔγγραπται, it is written', O.H.G. *ginoman ist* 'it is taken'; similarly pret. Goth. *ana þammei sō baúrǵs izē gatimrida was* 'ἐφ' οὗ ἡ πόλις αὐτῶν ὠκοδόμητο, was built, stood builded', O.H.G. *ginoman was* 'it had been taken, was in that condition'. Cp. Lat. *scriptum est* 'it is written' *scriptum erat* 'it was written' § 900 p. 447 f.

The same Idg. form in its later function of a historic perfect was superseded by the same participle with the auxiliary *ward* (*wurde*), e. g. Goth. *fralusans was jah bigitans varþ* 'ἀπολωλὼς ἦν καὶ ἠνρέθη, was lost and has been found again', O.H.G. *ginoman ward* 'it was taken'.

Everywhere but in Gothic the present passive too had to be superseded by a periphrasis: O.H.G. *ginoman wirdit* or *ist* 'is being taken' (Goth. *nimada*).

In the Active, the preterite present meaning could no longer be clearly put by the old perfect, Goth. *skatskáip* 'parted, divided' *nam* 'took' for example, as this had become a historic tense. Nor could it be put any better by the "weak" Preterite, as

Goth. *vaúrhta* 'worked' *nasida* 'saved'. This led to a periphrasis (not found in Gothic) of *bin* and *habe* with the preterite participle, as O.H.G. *queman ist* 'he has come, and is here' pret. *queman was* 'he had come and was here', *funtan habet* 'he has found and possesses' pret. *funtan habēta* 'he had found and possessed'. The participle with *habēm* was a true passive and belonged predicatively to the accusative object, cp. Lat. *cōgnitam hanc rem habet* and gr. *κρυπτόν ἔγω* 'abditum habeo' beside *κρυψῶς ἔχω* (see Thielmann, *Abhandlungen* W. v. Christ dargebracht, München 1891, p. 298). The participle with the presents *bin* and *habe* was used later, in Upper and Middle German, as a simple narrative tense without any reference to the present (cp. Lat. *finitum est* 'it was ended' on the analogy of *fīnīvit* 'ended'), whilst with the preterites *war* and *hatte* it had always served to express the pluperfect (cp. Lat. *finitum erat* 'it had been ended').

In Germanic the Idg. *sjo*-future was lost, nor did this branch, as others did, use certain conjunctive forms with future meaning only (as Lat. *erō*). For future events were used either perfect Present forms (see Streitberg, P.-B. Beitr. xv 119 ff.); or the living conjunctive, i. e. the Idg. optative (as Got. *jah sijaina þō tva du leika samin* 'και ἔσονται οἱ δύο εἰς ἓνα ἄρκα μίον'); or thirdly, periphrases with auxiliaries which naturally pointed to the future. But the use of these last with dependent infinitive (Goth. *haban*, *duginnan*, *skulan*, O.H.G. *scolan*, *muozan*, *wellen wollen*) did not lead to any fixt type in the old Germanic dialects, and each auxiliary bore its own proper meaning. Only phrases with *sollen* and *wollen* gained by degrees a simple future sense. Besides these periphrastic turns there was an idiom made up by *werden* (Goth. *vaírþan* O.H.G. *werdan*) with the present participle, which is found a few times, in Gothic, as *jūs saúrgandans vaírþiþ* 'ὅμως λυπηθήσεσθε, you shall be grieved'. This idiom in O.H.G. little by little won its way till all others had disappeared; but in Mid.H.G. the participle was exchanged for the infinitive.

§ 902. Baltic. In Lithuanian all the old middle forms which were used passively dropt out of use, and the reflexive with *-si* only partially did for the passive, as *teip kalba-si* instead of *teip kalbamà* 'so it is said'; hence a periphrasis was used for the passive in all tenses. To express habit or duration the pres. part. in *-ama-s* is used, as *taĩ (yrà) sàkoma* 'that is being said, that is usually said', *jis prakéikiams bús nũ visũ* 'he is constantly curst by all'. For completed action the participle in *-ta-s* is used; as *jis (yrà) prakéiktas* 'he is accurst', *dũrys uždarytos bũvo* 'the door was shut'. But it is usual to avoid passive constructions and so to express the idea as to make the active do for it.

Active Preterites like *vĩlkaũ* (§ 586 p. 126) and *viriaũ* (§ 593 p. 133) combine the meanings of historic perfect and present perfect; as *isz-áugo* 'he grew up' and 'he is grown up'. If it is needful to make the latter meaning clear beyond a doubt, the part. pres. act. with *esũ* may be used; as *asz (esũ) iszáugęs* 'I am grown up', *asz (esũ) iszmókęs* 'I have learnt', *jis bũvo pavařęs* 'he was impoverished'. This participle with *buvauĩ* also serves for a more exact expression of pluperfect time, cp. O.H.G. *qeman was* 'he had come' § 901 p. 450.

Wish is expressed by the Injunctive forms 1. pl. *-bime* 2. pl. *-bíte* from *✓bhey-* preceded by the Supine in *-tum*, as *sũktum-bime*. See § 727 p. 257. The 3<sup>rd</sup> sg. pl. and dual *sũkta* is without the auxiliary; for the 1<sup>st</sup> sing. we have *sũkciau sũkcze*. There are a great many bye-forms of this mood in the dialects (see Schleicher, Lit. Gramm. 228 f.; Kurschat, Gramm. d. litt. Spr. 300 f.; Bezzenberger, Beitr. z. Gesch. d. lit. Spr. 212 ff.; Leskien-Brugmann, Lit. Volksl. u. Märrh. 315 f.; for Lettic, see Bielenstein, Die lett. Spr. II 158 ff.); we cannot here enter into the history of these, which is sometimes very obscure.

§ 903. Slavonic. The Slavonic Imperfect is the imperf. *\*jachũ* 'eram' for *\*es-o-m* (§ 510 p. 76) added to the Instrumental case of nomina actionis in *-ē* and *-a*. To the first members of these compounds there are parallels in Italic

and Keltic, and doubtless in Sanskrit, as we have seen in § 896 Rem. p. 445, § 899 p. 447. O.C.Sl. *vidě-achŭ* 'I saw' like Lat. *vidē-bam*, *oslabě-achŭ* 'I became weak' like *albē-bam*, *nesě-achŭ* 'I carried' *pečaachŭ* 'I backed' for \**pekě-achŭ* (I § 76 p. 65) like *ferě-bam*, *borja-achŭ* 'I fought' for \**borjě-achŭ* (see as cited) like *capiš-bam*, *laķa-achŭ* like *plantā-đam*.

For Present Perfect was used the pres. part. in *-lŭ* (II § 76 p. 212) with *jesmŭ*, as *prišlŭ jesmŭ* 'I am come, I am here'. The same participle and *běachŭ* or *běchŭ* formed the Pluperfect, if need were to express this point of time exactly; as *posŭlalŭ běaše* 'he had sent'.

As in Germanic, when the old *sjo-* future was lost (cp. § 760 p. 278), future time was expressed either by the present of perfect verbs, or by a periphrasis consisting of Auxiliaries + dependent Infinitive. Such auxiliaries were in O.C.Sl. *imamŭ* ('I have'), *choštq* ('I wish'), *načŭnq* ('I will begin'), all of which with others (Miklosich, Vergl. Gr. iv 862 ff.), including *bqđq* ('I will, will be'), occur in other dialects. In some of the modern dialects, one or other of these verbs is used exclusively, just as *werde* with the infinitive in High German.

### UNEXPLAINED FORMATIONS.

§ 904. A number of fertile tense types have now, with certain reservations, been compared with those of other languages, or explained as due to some analogy which has been pointed out within the same language; for instance the Greek *x*-perfect (§ 864 Rem. p. 412), or the Latin preterite in *-vŭ* and *-uŭ* (§ 875 p. 423). But there are many such types, characteristic enough in their own language, whose origin is still so dark that they cannot be brought in place amongst those already given. These may now be mentioned.

§ 905. Aryan. The 3<sup>rd</sup> sing. aor. pass. (also mid.) in *-i*, mostly with *a* in the root-syllable, in Vedic and Avestic, with or without augment like the other augmented tenses (as

usual, the unaugmented forms can have a conjunctive meaning). Examples: Skr. *á-vác-i vác-i* Avest. Gath. *a-vác-i vác-i* √ *ueq-* 'speak'; Skr. *á-dhar-i* O.Pers. *a-dar-iy* √ *dher-* 'hold fast'; Skr. *ájani* √ *ġen-* 'gignere', *ádarši* √ *derk-* 'see', *áyōji* √ *jeug-* 'yoke', *á-jhā-yi* stem *ġn-ē- ġn-ō-* 'noscere'; Avest. *jaini* √ *ghen-* 'strike, slay'.

It has often been assumed that *-i* is identical with the ending of the 1<sup>st</sup> sing. mid. *-i* (as in *á-kr-i*), just as *-ē* in the perfect did for both 1<sup>st</sup> and 3<sup>rd</sup> singular. The difference of vowel grade in the root syllable is generally compared with that in the 3<sup>rd</sup> sing. *u-vác-a* : 1<sup>st</sup> sing. *u-vác-a*. Compare § 1054. 3.

§ 905<sup>a</sup>. The Armenian verb is permeated with analogical formations, which have largely destroyed the original structure of it. Specially difficult are the Conjunctive, Aorist, and Future forms characterised by *-ç-*, such, for instance, as conj. pres. *geriçem* (for *\*gerēçem*) aor. *gereçi* (for *\*gereaçi*, 3<sup>rd</sup> sing. *gereaç*) fut. *gereçiç* from *gerem* 'capio', where not only does *ç* need further explanation (cp. § 672 pp. 204 f.), but also the vowels that go with it.

§ 906. In Irish, no explanation has been found for what is called the Secondary Present (indic. and conj. impf.),<sup>1)</sup> as *no berinn* 2<sup>nd</sup> sing. *no bertha* etc. The 3<sup>rd</sup> sing. *no bered* is perhaps for *\*bhere-to* = Gr. *φέρε-το*.

§ 907. In Germanic, explanation is still to seek for the much discussed Weak Preterite,<sup>2)</sup> whose chief mark is a *t*-sound.

1) Windisch, Das ir. praes. secundarium, Kuhn's Zeitschr. xxvii 156 ff.

2) Begemann, Das schwache Präteritum der german. Sprachen, Berl. 1873. *Idem*, Zur Bedeutung des schw. Prät. der germ. Spr., Berl. 1874. Fr. Carter, On Begemann's Views as to the Weak Preterite of the Germanic Verbs, Transactions of the Am. Phil. Assoc. vi (1875) pp. 22 ff. Wickberg, Über den Ursprung der schwachen Präteritalbildung in den german. Sprachen, Lund 1877. Bugge, Das schwache german. praeteritum, Kuhn's Zeitschr. xxiii 523. Amelung, Die Perfecta der schwachen Conjugation, Zeitschr. deutsch. Altert. xxi 229 ff. Paul, Zur Bildung des schwachen Präteritums und Participiums, Paul-Braune's



This is found alongside of the so-called primitive Presents, as often as their part. pret. pass. is formed with the suffix *-to-*, as Goth. *vaúrhta* O.H.G. *worhta* from *vaúrkja wurk(i)u* 'I work', Goth. *pūhta* O.H.G. *dahta* from Goth. *pugkja* O.H.G. *dunk(i)u* 'I think', Goth. O.H.G. *brahta* from *brigga bringu* 'I bring'. Next, the Preterite Present has also this preterite, as Goth. *ga-daúrsta* O.H.G. *gi-torsta* from *ga-durs gi-tar* 'I dare', Goth. *skulda* O.H.G. *scolta* from *skal scal* 'I shall', Goth. *munda* from *man* 'I think', *kunþa* from *kann* 'I know, learn'. Lastly, it is found with all weak verbs, as Goth. *nasida* O.H.G. *nerita* from *nasja neriu* 'I save', Goth. *salbōda* O.H.G. *salbōta* from *salbō salbōm* 'I smear, anoint', Goth. *habāida* O.H.G. *hapta habēta* from *haba habēm* 'I have'.

In the Indicative, the dental was followed by *ē* sometimes and sometimes *ō*, as Goth. 2<sup>nd</sup> sing. *nasidēs* contrasted with O.H.G. *neritōs* (but also *chi-minnerōdēs* like O.Sax. *habdes*); 1<sup>st</sup> and 3<sup>rd</sup> sing. Goth. *-da* O.H.G. *-ta*; Norse Run. 1<sup>st</sup> sing. *worah-to* 'I made' 3<sup>rd</sup> sing. *wurte urte* 'he made'; in the plural O.H.G. *-tum -tut -tun* (Alemann. *-tōm -tōt -tōn*), Goth. *-dēdum -dēduþ -dēdun*. Opt. Goth. *-dēdjau -dēdeis* etc., O.H.G. *-ti -tīs* etc.

The connexion with the *to*-participle is unmistakable, if the treatment of the participial *t* under Verner's Law be borne in mind; e. g. Goth. *kunþa* like partic. *kunþa-*, *munda* like partic. *munda-*.<sup>1)</sup> But it does not follow that the dental of the weak preterite was always Idg. *t*. Not so; but forms with Idg. *dh*, *d*, or *th* may be included in this group, and the relation to the participle may be secondary. Indeed, there must be some

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Beitr. VII 186 ff. Möller, *Kunþa* und das *t*-Präteritum, *ibid.* VII 457 ff. Sievers, Zur Flexion der schwachen Verba, *ibid.* VIII 90 ff. Collits, Das schwache Präteritum des Germanischen, Am. Journ. Philol. IX 42 ff. = Bezzenberger's Beitr. XVII 227 ff. Johansson, Zur Flexion des schwachen Präteritums im Got., Kuhn's Zeitschr. XXX 547 ff. Other works are cited in those here enumerated.

1) For O.H.G. *forah-tu* 'feared', whose old participle is the adj. *forah-t* Got. *faúhr-t-s* 'timid', the present *t* must be taken into account (*furiht(i)u* Got. *faúrhja*). See § 685 p. 216.

such forms in the group; for example, O.Sax. *libda* 'lived' from  $\sqrt{\text{leip-}}$  cannot have had Idg. *t* in the ending, and the partic. *ge-libd* must be instead of *\*-lift* and due to the analogy of the preterite.<sup>1)</sup> Just as the Latin Perfect included a variety of quite different tense forms, to which similar use has given the same inflexions, so the Weak Preterite in Germanic may have absorbed alien elements. That Goth. *iddja* (pl. *iddjēdun*) is the Sanskrit *á-yā-m* or perhaps its byeform *iyā-m* we have seen in § 478 p. 26, § 587 p. 128 (compare § 886 Rem. p. 434). Preterites of our Present Class I. may be included in the weak preterite, since e. g. Goth. *mun-dēs*<sup>2)</sup> *vil-dēs* may be equated with Skr. 2<sup>nd</sup> sing. mid. *ma-thās* (*á-ma-thās*) *vṛ-thās* (*á-vṛ-thās*), compare Gr.  $\lambda\text{-}\tau\acute{\alpha}\text{-}\theta\eta\varsigma$  = Skr. *á-ta-thās* § 503 p. 67. Again, O.H.G. *wissun* as an *s*-aorist may be compared with Gr.  $\iota\sigma\alpha\nu$  (§ 827 p. 365), and forms like *salbō-ta* may be compounds of the same kind as Lat. *ama-bam* O.C.Sl. *děla-achŭ* (§ 899 p. 447, § 903 p. 451 f.), having for the second member the preterite of *dhē-* 'do' *\*(e-)dhē-m*, or the preterite *a*-injunctive *\*dh-a-m* (§ 507 p. 74, § 937).

§ 908. In Lithuanian, the growth of the Imperfect of habit in *-davau* is obscure; examples are *piáu-davau* 'I used to cut' 3<sup>rd</sup> sing. *piáu-davo* part. *piáu-davęs* (fem. *-davusi*), *sūk-davau* 'I used to twist', *matý-davau* 'I used to see'. The ending *-avau* recalls *baĩtavau* pret. of *baĩtāju* 'I gleam white', and recalls *d* in the present endings *-d-inu* and *-d-au*, treated in §§ 700 f. pp. 226 ff.

1) Nothing prevents our putting this re-formation of the participle back to protothnic Germanic; and so Goth. *ga-hugd-s* O.Sax. *gi-hugd* 'thought, reason, understanding' beside pret. O.Sax. *hoyda hugda* O.H.G. *hoeta* part. O.Sax. *gi-hugd* O.H.G. *ge-huct* does not weigh against the connexion of Germ. *hug-* with Skr. *śuc-* (I § 439 p. 327, § 447 p. 332).

2) For Goth. *mun-dēs* = Skr. *ma-thās* compare some recent remarks by Streitberg, *Zur Germ. Sprachgesch.*, 79.

FORMATION OF THE MOOD STEM.<sup>1)</sup>INJUNCTIVE.<sup>2)</sup>

§ 909. Injunctive (or Spurious Conjunctive) is a name given to forms which look like unaugmented indicative forms belonging to a tense which is properly augmented; thus *\*bhere-t* = Skr. *bhārat* Gr. *πέρε*, cp. imperf. *á-bhara-t* ἄ-περε. Injunctive forms therefore have the secondary personal endings.

In the parent language they had a very wide scope; perhaps these are really the oldest forms of the verb finite, which do not yet show in their form either distinction of time, or distinction of the ideas conveyed by the words indicative and conjunctive (wish, futurity). In historical times we find these used in three different ways:

1) L. Tobler, *Übergang zwischen Tempus und Modus* etc., see p. 33 footnote 1. S. H. A. Herling, *Vergleichende Darstellung der Lehre vom Tempus und Modus*, Hannover 1840. Wüllner, *Die Bedeutung der sprachlichen Casus und Modi*, Münster 1827. C. F. Nägelsbach, *De vera modorum origine*, Erlang. 1843. M. L. E. Rusén, *Unde notiones modorum verbi sint repetendae*, Upsala 1855. A. Bergaigne, *De coniunctivi et optativi in Indoeuropaeis linguis informatione et vi antiquissima*, Paris 1877.

R. Kohlmann, *Über die Modi des griech. und des lat. Verbums in ihrem Verhältnis zu einander*, Eisleben 1883.

Scheuerlein, *Über den Charakter des Modus in der griechischen Sprache*, Halle 1842. W. Büttner, *Vom Optativus und Coniunctivus*, I, Schweidnitz 1879.

W. Weissenborn, *De modorum apud Latinos natura et usu*, I, Eisenach 1846. *Idem*, *Bemerkungen über die Bildung des Modus im Lat.*, *Philologus* 1 589 ff. Works on the future perfect and the conjunctive perfect are given in the footnote to page 346.

Jellinek, *Germanische Conjunctive*, in: *Beitr. zur Erklärung der germ. Flexion* (Berl. 1891) pp. 94 ff.

2) The Author, *Der sogen. unechte Conjunct.*, *Morph. Unt.* III 1 ff. M. Bloomfield, *On Certain Irregular Vedic Subjunctives or Imperatives*, *Am. Journ. Phil.* v 16 ff. Thurneysen, *Der ir. Imperativ auf -the*, *Idg. Forsch.* I 460 ff.

(1) Indicative Present. Skr. Ved. *cōdaya-t* 'he sets afire' and others (Delbrück, Altind. Syntax 354 f.). Gr. Dor. and Cypr. *φέρε-ς* 'thou bearest', Att. *τίθη-ς* 'thou placest'; cp. also the Author, Gr. Gr.<sup>2</sup> § 160 Anm. p. 185 on the present (timeless) use of the ind. aor., as in *κάρθαν' ὁμῶς ὁ τ' ἀεργὸς ἀνὴρ ὅ τε πολλὰ ἐοργάζ.*<sup>1)</sup> Lat. *vehi-s im-plē-s ī-s s-u-m* (§ 528 p. 91). O.Ir. 2<sup>nd</sup> sing. *-bir* 'fers' for *\*bhere-s* 3<sup>rd</sup> sing. *-beir* for *\*bhere-t*. O.Icel. *ero eru* 'are' for *\*iz-únþ* (§ 507 pp. 73 f., § 508 p. 74). Lith. *blį-o-si* 'he fears' for *\*bhij-a-t*, *jū'sto* 'he girds' for *\*jöstā-t*, Pruss. *waitia* 'he speaks' (§ 782. 4 p. 310); O.C.Sl. *beretŭ* 'fert' 3<sup>rd</sup> pl. *beratŭ* for *\*bhere-t* *\*bhero-nt* with the particle *u* (§§ 999 and 1026).

The only difference between these and the indic. forms in *-ti -nti* is that the latter have the particle *i* affixed; and this is apparently just what marked the new forms clearly out as present indicative (§ 973).

(2) Indicative Preterite. Skr. Ved. *bhāra-t* 'he bore'. Gr. Hom. *φέρει* 'he bore'; special mention must be made of the Ionic frequentatives *φενύεσκον* etc. (§ 673 p. 206), which regularly lack the augment. Lat. *-ba-s* Osc. 3<sup>rd</sup> pl. *-fans*, Lat. *era-s* (§ 583 p. 124), Osc. *kúm-bened* 'convēnit' (§ 867. 5 p. 415). O.Ir. *do bert* 'he brought' for some middle form in *-to* (§ 506 p. 72 f., § 826 p. 364). O.H.G. *biggi* 'thou didst bite' = Skr. *(ā-)bhīd-a-s* (§ 893 p. 441). Lith. *būvo* 'he was'; O.C.Sl. *tekŭ* 'I ran'. Cp. § 483 p. 31 ff.

### (3) Conjunctive.

(a) Conj. = Wish. The 2<sup>nd</sup> pl. and 2<sup>nd</sup> and 3<sup>rd</sup> dual were firmly rooted among the imperative forms as early as the parent language: Skr. *bhāra-ta* 'ferte' *bhāra-tam bhāra-tām*, Gr. *φέρε-τε φέρε-ρον*, Lat. *agi-te*; O.Ir. 2<sup>nd</sup> pl. *berī-d*; Goth. 2<sup>nd</sup> pl. *batrī-þ* (2<sup>nd</sup> dual *batra-ts* with primary ending); beside *\*es-ti* 'is' Skr. *s-tá s-tám s-tām*, Gr. *ἔσ-τε ἔσ-ρον*, Lat. *es-te*;

1) The use of the augmented forms in the same way may be compared with the use of Skr. *agāt* instead of *gāt* after *mā* in the *Mahā-Bharata* (Holtzmann, Gramm. aus dem Mahābh., 28).

*s*-Aorists Skr. *aviṣ-tā-na* (*-na* is a particle, see § 1010) *aviṣ-tām* *aviṣ-tām* from *áv-a-ti* 'he desires', Gr. *δειξά-τε* *δειξά-τον* from *δείξ-νῃ-σι* 'shows'. In the other persons the proethnic imperative has other formations.

But in some of the derived languages these other persons also are found with the sense of Wish; and here and there one of them does duty for some part of the imperative.

Skr. Ved. *prá vācam* 'I will praise', *dās* 'give', *juṣata* 'let him be pleased' 3<sup>rd</sup> pl. *juṣanta*, and many more. Then we have as part of the Aryan imperative such forms as 3<sup>rd</sup> sing. Skr. *bhārat-u* Avest. *barat-u* 'ferito' 3<sup>rd</sup> pl. Skr. *bhārant-u* Avest. *baran-tu* 'ferunto', Injunctives + particle *u* (§§ 992. 2 and 1017).

Gr. 2<sup>nd</sup> sing. mid. *φέρεο* *φέρον* for \**φέρε-σθ* (cp. imperf. *ἐ-φέρω*), *βαλοῦ* for \**βαλέ-σθ* (on the accent of this form see § 958), *φάο* from *φη-μι* 'I say', aor. *ῥέο* *ῥοῦ* beside *ἐ-ῥέ-μην* 'I placed for myself', used as regular imperative forms. Rarely also the corresponding 2<sup>nd</sup> sing. act. as *ἐνί-σπ-ε-ς* beside *ἐνί-σπ-ε* 'insece', *ἐπί-σχε-ς* beside *ἐπί-σχε* 'stop', *ἄγ-ε-ς* *ἄγε*, *φέρε* (Hesych.); cp. also § 932 on *ῥέξ* *ῥός*.

Lat. *sequere* = gr. *ἔπει*, as regular imperative.

O.Ir. forms of the *s*-aorist, as *comèir* 'get up' for \**-rec-s-s*, *tair* 'let him come' for \**-inc-s-t* (§ 826 p. 363). Also the 2<sup>nd</sup> sing. imper. mid. in *-the*, as *cluinte* 'exaudi' beside indic. *ro-chluinethar*, *aigde* 'fear' beside *-āgur*, *foilsigthe* 'revela', since *-the* is the Skr. secondary ending *-thās* (§ 1051).

O.H.G. *ni curi* 'noli' for \**kuz-i-z* \**gus-e-s* beside 2<sup>nd</sup> pl. *ni cur-e-t*; Goth. *visa-m vaila* 'ἐνφρανθῶμεν', O.H.G. *fara-m* (*fara-mēs*) 'transeamus'.

Lith. *te ne ei* 'let him not go' for \**eṭ-t*, *tè-suka* 'let him turn' *te-māto* 'let him see',<sup>1)</sup> 1<sup>st</sup> pl. *ei-mè* 1<sup>st</sup> dual *ei-và* 'let us go' (§ 511 p. 77), O.C.Sl. *bqdq* 'sunto' (also found *bqdaqū* 'erunt'), *veli-te* 'command ye' (also indic. *veli-te* 'ye command'), see § 955 Rem.

1) Since forms like *sūka māto* were also used for pres. indic., it came about that indicative forms with primary endings, as *ei(i)*, could be used with a "permissive" meaning; e. g. *t'ei(i)*.

(b) Conj. = Future. Skr. Ved. *nēm* (= *ná im*) *agha naśat* 'him no mischief will reach' (cp. Delbrück, Altind. Syntax 358). In Lithuanian, some dialects have forms of the *s*-aorist like *dė-s-me* 'we will lay' *dėste dėsva dėsta* (§§ 828 f. pp. 365 f.).

#### CONJUNCTIVE.<sup>1)</sup>

§ 910. It has been pointed out (§ 489 pp. 47 f.) that in all the languages the same formative elements which mark what from its use is called the Conjunctive are also found in the Indicative. In this way we find used both *-e-* and *-o-*, the "Thematic Vowel", and also *-ā-* and *-ē-* (*-ō-*). It follows that these forms had originally a much wider use than they came to have afterwards; and it was only by degrees that some of them were appropriated to the Indicative and others for the Conjunctive. Even in the parent language the rule held good that forms with a thematic vowel were Conjunctive, where the Indicative was distinguished by having none; whilst if the Indicative had a thematic vowel, the Conjunctive had the suffixes *-ā-* or *-ē-* (*-ō-*). If the Indicative itself had *-ā-* or *-ē-* (*-ō-*) (Classes X and XI, §§ 578 ff. pp. 118 ff.), then Injunctive forms commonly served for the Conjunctive mood (§ 930).

Remark. As stems with *-e-* *-o-* and stems with *-ā-* *-ē-* (*-ō-*) originally did for both Indicative and Conjunctive, we may suppose that

1) Moulton, The Suffix of the Subjunctive, Amer. Journ. of Philol. x 285 f.

Bartholomae, Indisch *āi* in den Medialausgängen des Conjunctivs, Kuhn's Zeitschr. xxvii 210 ff.

Joh. Paech, De veteri coniunctivi Graeci formatione, Breslau 1861. H. Stier, Bildung des Conjunctivs bei Homer, Curtius' Stud. ii 125 ff. Stolz, Zum Conj. des griech. sigm. Aor., Idg. Forsch. ii 153 ff.

Thurneysen, Der italokeltische Conjunctiv mit *ā*, Bezzenberger's Beitr. viii 269 ff.

Bréal, Un mot sur les subjunctifs latins en *am*, Mém. Soc. ling., vi 409 ff. L. Job, Le subjunctif latin en *-am*, *ibid.* vi 347 ff. V. Henry Esquisses morphologiques III: Le subjunctif latin, Douai 1885. G. Curtius, Der lat. Conjunctiv des Imperfects, in his Stud. viii 460 ff. Corssen, Die syncopierten Futurformen auf *-s* im Umbr., Osk. und Volsc., in: Beitr. zur ital. Sprachk. 533 ff.

tense-stems of other kinds had the same double use. As a matter of fact this was so in the fullest sense wherever these stems had the secondary personal endings, that is, were Injunctive (§ 909). But even some forms with the primary endings and without these conjunctive suffixes are so used: Skr. 2<sup>nd</sup> sing. *vê-ṣi* 'thou comest near' and 'come near' (3<sup>rd</sup> sing. *vê-ti* 'he comes near'), *kṣê-ṣi* 'thou abidest' and 'abide thou' (3<sup>rd</sup> sing. *kṣê-ti* 'he abides') are two examples out of many (Delbrück, Altind. Verb. 31 and 34 f.), Avest. Gath. *dōiṣt* 'perceive thou', Gr. imper. 2<sup>nd</sup> sing. *λίσσεαι* 'lay thyself' for \**λεπ-σ-σαι* (§ 969. 2). Compare § 974 Rem. On the use of the Att. indic. forms *μολθοῖς* *μολθοῖ* for the conjunctive see § 923.

The Conjunctive has a simple Future meaning in addition to that of wish (in which I include deliberative and dubitative). Often these forms drop their other meanings in the separate languages, and have that of Future only, or chiefly. Then they are called future in the grammars, as are for instance Lat. *erō viderō*.

In Armenian the Conjunctive formation appears to be entirely lost.

In Germanic and Balto-Slavonic it is lost all but a few scanty survivals, which will be given below. In both these branches the Optative took its place. First both these groups were used together (as in the Latin conjunctive, *edā-mus agā-mus* true conj. and *edī-mus sī-mus* optative); then the Optative won the day. Examples of Opt. forms used as Conj. in these languages are: Goth. *ḥairhaggaggāima* 'διέλθωμεν, let us go through', *ni maúrþrjáis* 'μὴ φονεύσῃς'; *te-sukē* 'let him turn' (imperative)<sup>1)</sup>, O.C.Sl. *ne vūvedi nasū vū iskušeniže* 'ne nos inducas in tentationem, μὴ εἰσενέγκῃς ἡμῶς' etc.

We now come to details. The Conjunctive formations may be divided into two groups, according as the Indicative stem (I) ended in a consonant, as \**es-ti* \**eī-ti* \**gney-ti*, and contained the thematic vowel, as \**bhere-ti*, or (II) ended in a long vowel, as \**e-stā-t* \**plē-ti*.

1) May also mean 'he may turn, he is to be allowed to turn'.

I. CONJUNCTIVE WHERE THE INDICATIVE STEM ENDS IN A  
CONSONANT OR HAS A THEMATIC VOWEL.

A. Indicative Stem ends in a Consonant.

§ 911. The Conjunctive from these stems had in the parent language, and continued to have, the Thematic Vowel, as *\*eḡ-e-t(i)* (Skr. *áyati áyat*) beside Indic. *\*eḡ-ti* 'goes'. The stem had its strong form, the ablaut-syllable the 1<sup>st</sup> strong grade (e-grade in the *e* : *o*-series): pres. conj. *\*eḡ-e-t(i)* beside indic. *eḡ-i-*, *\*ḡ-neu-e-t(i)* (Skr. *ḡ-náv-a-t(i)*) beside indic. *\*ḡ-neu-* *\*ḡ-nu-*, *\*steu-e-t(i)* (Skr. *stáv-a-t(i)*) beside indic. *\*steu-* *\*stu-* (§ 494 p. 54 f.); s-aor. conj. *\*qeḡ-s-e-t(i)* (Skr. *cé-ṣ-a-t(i)*) Gr. 2<sup>nd</sup> pl. *τετι-ο-ε-τε* beside indic. *(e-)qeḡ-s-* *\*(e-)qi-s-* (§ 811 p. 348); perf. conj. *\*te-ten-e-t(i)* (Skr. *ta-tán-a-ti*) beside indic. *\*te-ton-* *\*te-tn-* *\*te-tn-* (§ 843 p. 384).

§ 912. Pr. Idg. Conjunctives of this group have been touched upon frequently in our discussion of the Tense Stem. I therefore confine myself here to a few examples.

Present. Class I (§§ 492 ff.): *\*és-e-t(i)* beside *\*és-ti* 'is': Skr. *ásat(i)*, Gr. 1<sup>st</sup> sing. *ἔ-ω* (but *ἔης ἦς* etc. belong to B), Lat. (fut.) *er-i-t*. Class III (§§ 536 ff.): Skr. *bi-bhar-a-t* beside *bí-bhar-ti* 'bears', *bī-bhay-a-t* beside *bí-bhē-ti* 'fears'. Class V (§§ 555 ff.): Skr. *ba-bhas-a-t* beside *bá-bhas-ti* 'eats, devours'. Class VII (§§ 567 ff.): Skr. *jaṃ-ghán-a-t* beside *jám-ghan-ti* intens. 'strikes, kills'. Class XV (§§ 625 f.): Skr. *riṇác-a-t* beside *riṇák-ti* 'lets go, makes empty'. Class XVII (§§ 638 ff.): Skr. *ḡ-náv-a-t* beside *ḡ-nó-ti* 'excites, sets in motion'. Class XIX (§§ 656): *dvē-ṣ-a-t* beside *dvē-ṣ-ti* 'hates'.

s-Aorist (§§ 810 ff.). Skr. *nē-ṣ-a-t(i)* beside *á-nāi-ṣ-am* 'I feared', Gr. *τετι-ο-ο-μεν* beside *ἔ-τετι-ο-α* 'I paid', Lat. (fut.) *dix-ō* beside *dix-i*, O.Ir. *for-tias* 'subveniam' beside *inconj. for-tē* 'subveniat' (§§ 826 p. 363 f.). Gr. *εἰδ-ί-ω* *εἰδῶ* (but *εἰδῆς* etc. belong to B) beside *ᾔδ-εα* 'I knew' for *\*ῆ-Feid-εσ-α*,



Umbr. *eest est* 'ibit' beside Gr. *ἦεν* 'I went' instead of \**ē-es-η* (§ 836 pp. 372 ff.). Skr. *bōdh-iṣ-a-t* beside ind. 3<sup>rd</sup> pl. mid. *ā-bōdh-iṣ-ata* from *budh-* 'watch, notice', *gā-siṣ-a-t* beside ind. 3<sup>rd</sup> pl. *ā-gā-siṣ-ur* from *gā-* 'to sing'; add perhaps Gr. fut. *κρεμάω* from stem *κρεμασ-* 'to hang' (§ 840 p. 377). Lat. (fut.) *vid-er-ō* beside ind. 2<sup>nd</sup> pl. *vid-is-tis*. Gr. *ἐρύ-σσ-ο-μεν* beside *ἐρύ-σσ-α* 'I dragged', Lat. *amā-ss-i-t*.

Perfect (§§ 843 ff.). Skr. *ta-tán-a-t(i)* beside ind. *ta-tán-a* from *√ten-* 'stretch'. Gr. *πενόισθμεν* instead of \**νε-πειθ-ο-μεν* beside *πί-νομθ-ι* 'he trusts', *εἰδ-ο-μεν*) *εἰδ-ο-μαι* beside *οἶδ-ε*; but it can be grouped with the pres. \**yeid-mi* Skr. *véd-mi* (§ 493 p. 52). Goth. *ōgs* 'fear thou' for \**agh-e-s* beside *ōg* 'fears' (§ 882 p. 430).

§ 913. Aryan. The Thematic formation is fertile in Vedic, Avestic, and Old Persian. In later Sanskrit nothing remains but the 1<sup>st</sup> persons, which are now called 1<sup>st</sup> person Imperative.

The personal endings here as in the *a*-conjunctive (§ 921) were in Sanskrit and Avestic sometimes primary and sometimes secondary; the Middle had the primary almost always (details may be seen in Delbrück, *Altind. Verb.* 191 ff.; Whitney, *Skr. Gr.* §§ 560 ff.; Bartholomae, *Altiran. Verb.* 130 f.). The few Old Persian forms which occur all show a primary ending. As to Skr. middle forms like *kṛṇāvamahāi* instead of *kṛṇāvamahē*, see § 922.

Further examples (cp. § 912). Present. Skr. *kār-a-ti* *kar-a-nti* Avest. 1<sup>st</sup> sing. *carā-nī* beside ind. Skr. *kār-ṣi* Avest. *cor'-p* from *√ger-* 'make'; Skr. *áy-a-t(i)* Avest. *ay-a-p* beside ind. *é-ti* *aē-iti* from *√ei-* 'go'; Avest. *aṇh-a-iti* *-a-p* O.Pers. *ah-a-tiy* Skr. *ās-a-t(i)* beside ind. Skr. *ās-ti* etc. from *√es-* 'esse'. In Sanskrit this Conjunctive formation is also found beside Indicatives with the suffix *-t-*, as *brāv-a-t(i)* beside *brāv-ī-ti* 'speaks' (§ 574 p. 116). Skr. *ju-hav-a-ti* beside *ju-hō-ti* 'offers', Avest. *ci-kay-a-p* 3<sup>rd</sup> pl. *rikaen* = *ci-kay-en*

1) Compare for this Conj. W. Schulze, *Kuhn's Zeitschr.* xxix 251.

beside Skr. *ci-ké-ti* 'observes, perceives'. Skr. *yunáj-a-tē* beside *yunák-ti* 'yokes', Avest. 1<sup>st</sup> pl. mid. *cināp-a-maidē* beside *cinas-ti* 'teaches'. Skr. *kṛ-ṇāv-a-t(i)* Avest. 1<sup>st</sup> sing. *ker'-nav-a-ni* beside *kṛ-ṇō-mi* *ker'-nao-mi* 'I make'. *s*-Aorist. Skr. *vá-s-a-ti* Avest. *vərogh-a-iti* from *√ uen-* 'win, get, conquer'. Skr. *san-iš-a-t* beside *á-sān-iš-am* 'won', Avest. 1<sup>st</sup> sing. *xšnev-iš-a* from *xšnu-* 'join oneself'. Perfect. Skr. *ja-ghán-a-t(i)* beside *ja-ghān-a* from *√ ghen-* 'strike, kill', *mu-mōc-a-t* beside *mu-mōc-a* from *muc-* 'let go', Avest. 1<sup>st</sup> pl. *ḍəh-a-ma* beside *ḍəh-a* (Skr. *ḍas-a*) from *√ es-* 'esse' (but the form may also be connected with the 3<sup>rd</sup> sing. *ḍəh-a-p*, under *B*).

Rarely we find a divergence in the Present from the rule of gradation which holds for this Conjunctive formation (§ 911 p. 461), as Skr. 3<sup>rd</sup> dual *añj-a-tas* beside 3<sup>rd</sup> pl. *anáj-an* (indic. *anák-ti* 'anoints, adorns') formed as though the indic. were \**ának-ti*. On the numerous analogical forms in the *s*-aorist, such as Skr. *dṛk-ṣ-a-sē tār-iš-a-t*, see § 815 p. 353 and § 839 p. 375.

For the *a*-Conjunctive with an unthematic Indicative see § 921.

§ 914. Greek. The 1<sup>st</sup> sing. act. in *-ω* is regular in all dialects and periods. With this exception, the Conjunctive with a long vowel proved a formidable rival to the thematic formation. The latter held its ground most tenaciously in the *s*-aorist.

Very little trace is left in the stem of the proethnic law of gradation (§ 911 p. 461).

Present. This Conjunctive is fertile only in the oldest poetical language. Hom. *ἵομεν* instead of \**ἑ(ι)-ο-μεν* and *ῥ-ο-μεν* from *ελ-μι* 'I will go'; *ῥομεν* is to be compared with Skr. *t-mahē* (see § 493 p. 52, § 497 p. 56), or else it is due to the analogy of *ῥή-ο-μεν* *δω-ο-μεν* and the like (cp. § 934 on Messen. *ἦνται* Hom. *μετ-ή(ω)*). Hom. *φθί-ε-ται* (instead of \**φ.θε(ι)-ε-ται*) beside *φθί-το* 'was destroyed', *ἄλ-ε-ται* beside *ἄλ-το* 'he leapt'. On the analogy of these were made similar Conjunctives for indic. stems in *-α* *-ε* or *-ο*, as *πτή-ο-μεν* *ῥή-ο-μεν* *δω-ο-μεν* *βλή-ε-ται* (§ 934).

Some such conjunctives survived elsewhere, for instance in Attic, crystallized and used only for the Future; ἔδ-ο-μαι 'I will eat' (cp. inf. ἔδ-μεναι, Skr. indic. *át-ti*), πί-ο-μαι 'I will drink' (beside imper. *πί-θι*), χέ-ι(φ)-ω 'I will pour' (beside indic. ἔ-χε(φ)-α ἔ-χυν-το).

Remark 1. In an Aeolic insor. (discussed by Meister, *Anzeiger für idg. Spr.- und Altertumsk.*, 1 203 f.) we have the 3<sup>rd</sup> pl. *τέκοισι* with the meaning of Att. *τέκωσι*. If the reading is true, we must grant it to be an instance of the *o*-conj. invading the domain of the long vowel. If so, we should have a right to question whether Homeric conjunctives like *οιρέπεται* (in subord. clause after *δρ' ἄν*) ought really to be denied. These are collected by Stier in Curtius' *Stud.* II 138 f.; Curtius himself regards them as mythical (Verb, II<sup>3</sup> 87 ff.).

*s*-Aorist. There are many examples in Homer and other Homeric poets; as *τίσσομεν τίσσετε, βιήσεται, ἀμείψεται*. So there are in inscriptions of the 5<sup>th</sup> cent. B. C., from Ephesus, Teos, and Chios; as 3<sup>rd</sup> sing. in *-ει, ἀποκρύψει*, and 3<sup>rd</sup> pl. *πρήξοισιν* (Att. *πράξωσιν*) with *-οι-* instead of *-ον-* by Lesbian influence (I § 205 p. 172). In Cretan we find such forms as 3<sup>rd</sup> sing. *δεῖξει*. Then there are Epic imperatives such as *ἄξ-ε-τε* 'bring ye' *ἄξ-ε-σθε ὄψ-ε-σθε* 'see ye' (§ 833 p. 370), and the futures *ἄξω ὄψομαι*, which must not be separated from the imperatives; indeed the whole Greek *s*-Future may perhaps come from the Conj. of the *s*-aorist (§ 747 p. 269). Lastly, the 1<sup>st</sup> sing. *εἰδέω* (2<sup>nd</sup> sing. *εἰδῆς* etc. goes under *B*) beside indic. *ᾔδεα* 'I knew' for \**ῥ-Feid-εσ-α* (§ 836 pp. 372 ff.).

Perfect. Survivals in Homer: *πε-ποίηθ-ο-μεν ἔδ-ο-μεν*, see § 912 p. 462; mid. *προσ-αρήρε-ται* Hes. Op. 431 (Vat. 2 *προσαρήσεται*). Attic imper. like *κε-κράγ-ε-τε κε-χρήν-ε-τε* (§ 854 p. 404).

Remark 2. It is strange that while Homer has *τίσσομεν* etc. he has no complementary conj. forms in *-εις -ει -ουσι*. We may conjecture that he really had, but that the symbols of the old alphabet, *-ΕΙΣ -ΕΙ -ΟΥΣΙ*, which had more than one value, were here misunderstood, and the forms disappeared, *-ης -η ωσι* being written instead.

Those conjunctives which are not used exclusively for future or imperative, are being attracted even in Homer to follow the

lead of those with long vowels, as ἴωμεν, ἄληται, πεποθωμεν. See § 923.

§ 915. *Italic*. Only found as a Future (cp. Att. ἔθ-ο-μαι, § 914).

Present. Lat. *erō er-i-s*: Skr. *ás-ā-ni* Gr. ἔ-ω, see § 912 p. 461.

*s-Aorist*. Lat. *dīx-ō dīx-i-s, fax-ō fax-i-tur, cap-s-ō* and the like, Umbr. Osc. *fust 'erit'*, Umbr. *furent 'erunt'* prupehast 'ante piabit', Osc. *deivast 'iurabit'* (§ 824 p. 362). Umbr. *cest est 'ibit'* ferest 'feret', Osc. *pert-emet 'perimet'* (§ 837 p. 374). Lat. *viderō liquerō*, then by analogy *sciderō totonderō dixerō* etc. (§ 841 pp. 378 f.). In the 3<sup>rd</sup> pl. of these future perfects, the ending *\*-erunt*, which was also the ending of the 3<sup>rd</sup> pl. indic. perfect, gave place to the optative ending *-erint* (beside 1<sup>st</sup> sing. *vid-erim*), just as we find *viderimus* instead of *viderimus*, *videritis* instead of *videritis*.<sup>1)</sup> Lastly, Lat. *amāssō turbāssitur habēssō*, for which infinitives were coined, as *impetrāssere*, on the analogy of *capessere* to *capessō* (§ 842 p. 381).

In the Conjunctive use (Wish), only the *ā-* and *ē-*forms (*B*) remained fertile; these also spread into the thematic conjunctive, as Lat. *e-ā-s* beside indic. *ī-s*, *plē-r-ē-s* beside indic. Skr. *ā-prā-s-am*.

§ 916. *Keltic*. *s-aorist* with meaning of Wish and more rarely of the Future; as from *tiagim* 'I step, go' the 1<sup>st</sup> sing. *-tias*, 3<sup>rd</sup> sing. *tēs tēis*, see § 826 p. 364.

§ 917. *Germanic*. Isolated Got. *ōgs* 'fear thou' beside perf. *ōg* 'fears' (§ 822 p. 430, § 912 p. 462).

## B. Conjunctive to a Thematic Indicative.

§ 918. These Conjunctives have for the Suffix long vowels, not subject to gradation, *-ā-* or *-ē-* (*-ō-*). These are the same

1) With this contamination compare the use of *sim edim* as conj. On the analogy of the fut. perf. *viderint* itself we have *erint poterint* instead of *erunt poterunt*.

as in the Indicative, Gr. ἰ-ῶ-ᾱ-ν Lat. *pl-ē-s*, which also have no gradation; this has been pointed out in § 578 p. 119.

-ā- is a Conj. vowel in Italic, Keltic, Slavonic, Germanic (?); -ē- in Greek and Italic; -ō- in Greek. -ē- and -ō- (φείρ-η-τε φείρ-ω-μεν) are connected closely (cp. Gr. indic. ζ-ῆ and ζ-ῶ-σι, ψ-ῆ and ψ-ω-ρός); but their distribution in the Greek system can hardly be original, through it is the same as -e- and -o- in the Indicative. It is likely that they just imitated the Indicative, differing only in length, for symmetry (cp. Arc. conj. ἰ-στᾱ-ροι beside indic. ἰ-στᾱ-μι ἰ-στα-μεν, Mess. conj. τί-θῃ-ντι beside indic. τί-θῃ-μι τί-θε-μεν § 934). What was the quality of sound which became Aryan -ā- cannot now be seen. And as long as this remains dark, so long it will be unknown how the ā- and ē- (-ō-) formations were distributed in the parent language. No inference can be drawn from the different use in Latin of *ag-ā-s* and *ag-ē-s*.

Remark. From the form of the 1<sup>st</sup> sing. act. Ved. *ārcā* (3<sup>rd</sup> sing. *ārc-ā-t*) Avest. *per<sup>s</sup>-ā* (3<sup>rd</sup> sing. *per<sup>s</sup>-ā-iti*) we may perhaps assume some direct connexion with the Greek formation (φείρ-ω beside 3. sing. φείρ-η); compare Lat. *ag-a-m* O.Ir. *do-ber* for \**ber-ā-m* O.C.Sl. *bera* for \**ber-ā-m*. The O.Lat. 1<sup>st</sup> sing. *age* may be for \**agō* by qualitative assimilation with *agēs* etc.: \**agō* beside *erō* like Skr. *ārcā* beside *brāra*.

§ 919. Pr.Idg. Class II (§§ 513 ff.): Skr. *bhār-ā-t(i)*, Gr. φείρ-ω-μεν φείρ-η-τε, Lat. (conj.) *fer-ā-s* (fut.) *fer-ē-s*, O.Ir. *do-ber* for \**ber-ā-m*, beside indic. Skr. *bhār-a-ti* etc. from √ *bher-* 'bear'; Skr. *vid-ā-t(i)* Gr. ἰδ-ω-μεν beside indic. Skr. *ā-vid-a-t* 'found' Gr. εἶδ-ε ἰδ-ε 'saw' from √ *ueid-*; Skr. *bhuv-ā-ni* Lat. *fu-ā-s* Osc. *fuid* 'fuerit' (for \**fu-ē-d*) beside indic. Skr. *ā-bhuv-a-t* Lat. (perf.) *fu-i-t* from √ *bheu-* 'be, become'. Class IV (§§ 547 ff.): Gr. γί-γν-η-ται Lat. *gi-gn-ā-s gi-gn-ē-s* beside indic. γί-γν-ε-ται *gi-gn-i-t*, Mid.Ir. *gignid* 'nascetur' ground-form \**gi-gen-ā-ti* (§ 544 p. 103) from √ *gen-* 'beget'. Class VI (§§ 561 ff.): Avest. *ja-yn-ā-p* Gr. πεί-φρ-ω-μεν Mid.Ir. 1<sup>st</sup> pl. (fut.) *gēnam* for \**ge-gn-ā-m* beside indic. ἔ-πει-φρ-ε from √ *ghen-* 'strike, kill'; Avest. *vaoc-ā-p* Gr. εἴπ-ω-μεν beside indic. Avest. *vaoc-a-p* Gr. ἔ-ειπ-ε Idg. \*(e)-ue-yq-e-t from √ *ueq-* 'speak'. Class XIII (§§ 607 ff.): Gr. πεί-φρ-ω-μεν from πεί-φω 'drink',

Lat. *li-n-ā-s* *li-n-ē-s* from indic. *li-nō* (cp. § 935). Class XVI (§ 627 ff.): Skr. *siñc-ā-s* beside *siñc-ā-ti* 'sprinkles' from  $\sqrt{\text{siñc}}$ , Gr. *σφίγγ-ω-μεν* from *σφίγγ-ω* 'I tie, bind', Lat. *jung-ā-s* *-ē-s* from *jung-ō*. Class XVIII (§§ 648 ff.): Skr. *inv-ā-t* from *i-nva-ti* 'subdues, oppresses', O.Pers. *kū-nav-a-hy* from *a-kū-nav-a* 'he made', Gr. Att. *τίν-ω-μεν* from *τίνω* 'I pay' for \**τι-νfw*, Lat. *minu-ā-s* *-ē-s* from *mi-nu-ō*. Class XX (§§ 657 ff.): Avest. 3<sup>rd</sup> pl. *baxš-ā-nti* from *bax-ša-iti* 'divides, receives as a share', Gr. *ἀέξ-ω-μεν* *αὐξ-ω-μεν* from *ἀέκ-σω* *αὐκ-σω* 'I increase', *τρέ-ω-μεν* from *τρέ-ί(σ)-ω* 'I tremble, flee', Lat. *vīs-ā-s* *-ē-s* from *vīsō* for \**vñ-sō*. Class XXII (§§ 670 ff.): Skr. *prch-ā-t* Lat. *posc-ā-s* *-ē-s* beside *prchā-ti* *posci-t* from  $\sqrt{\text{prek}}$  'ask, demand', Gr. *φάσκ-ω-μεν* from *φά-σκω* 'I inform, say' O.Ir. 1<sup>st</sup> pl. *-nasc-a-m* beside *nascim* 'bind' from  $\sqrt{\text{nedh}}$ . Class XXIII (§ 678): Gr. *διδάσκ-ω-μεν* from *δι-δά(κ)-σκω* 'I teach', Lat. *disc-ā-s* *-ē-s* from *discō* for \**di-tc-scō*. Class XXIV (§§ 679 ff.): Gr. *πέκτ-ω-μεν* from *πίκ-τω* 'I comb', Lat. *pect-ā-s* *-ē-s* from *pec-tō*. Class XXV (§§ 688 ff.): Gr. *πλήθ-ω-μεν* from *πλή-θω* 'I am full', *ἐλθ-η-ται* from *ἐλ-θω-μαι* 'I wish, desire', Lat. *cūd-ā-s* *-ē-s* from *cū-dō*. Class XXVI (§§ 705 ff.): Skr. *har-y-ā-s* Gr. *χαίρ-ω-μεν* Osc. heriad 'velit' beside Skr. *hār-ya-ti* *χαίρω* from  $\sqrt{\text{gher}}$  'take pleasure in'; Skr. *pāśy-ā-t(i)* Lat. *cōn-spici-ā-s* *-ē-s* beside *pāś-ya-ti* *-spic-iō* from  $\sqrt{\text{spek}}$  'see'; O.Ir. 3<sup>rd</sup> sing. *do-lēcea* beside *-lēc-iu* 'I let'. Class XXVII (§§ 728 ff.) Gr. *γαργαίρ-ω-μεν* beside *γαρ-γαίρω* 'I swarm with', Lat. *tin-tinni-ā-s* *-ē-s* beside *tin-tinn-iō*. Class XXVIII (§§ 734 ff.): Skr. 2<sup>nd</sup> sing. mid. *pyāya-sē* beside *py-ā-ya-tē* 'swells', Gr. *ζώ-ω-μεν* (Gort. 3<sup>rd</sup> pl. *δω-ω-ντι*) beside *ζ-ώ-ω* 'I live', Lat. *-pleā-s* for \**plē(i)-ā-s* beside *pleō* for \**pl-ē-(i)ō*, *videā-s* for \**vidē(i)-ā-s* beside *videō* for \**vid-ē-(i)ō* (*hiē-s* for \**hiā(i)-ē-s*? beside *hiō* for \**hi-ā-(i)ō*). Class XXIX (§§ 742 ff.): Skr. *prtan-y-ā-t* from *prtan-yā-ti* 'fights', Gr. *ιαίν-ω-μεν* from *ιαίνω* for \**i(σ)ανω* 'I quicken, make alive'. Class XXX (§§ 766 ff.): Skr. *apas-y-ā-t* from *apas-yā-ti* 'is active', *vasūy-ā-t* from *vasū-yā-ti* 'desires wealth', Gr. *τεκταίν-ω-μεν* from *τεκταίνω* 'I fashion' for \**τεκταιν-ω*, *τιμά-ω-μεν* *τιμῶμεν* *τιμά-η-τε* *τιμᾶτε*

from *τιμά-ω* 'I honour', *φιλέ-ω-μεν* *φιλωμεν* *φιλέ-η-τε* *φιλητε* from *φιλέ-ω* 'I treat as a friend', Lat. *custōdi-ā-s* *-ē-s* from *custōd-iō*, *fīni-ā-s* *-ē-s* from *fīni-ō*, *claudē-ā-s* from *claudē-ō*, *statu-ā-s* *-ē-s* from *statu-ō* (*plantē-s* for *\*plantā(i)-ē-s*? from *plantō* for *\*plantā(i)ō*). Class XXXII (§§ 788 ff.): Skr. *yōdhāy-ā-s* Lat. *jube-ā-s* from *yōdhāy-a-ti* 'involves in a fight' *jube-ō* (§ 794 p. 329), Gr. *φορέ-ω-μεν* *φορωμεν* from *φορέ-ω* 'I wear'.

§ 920. In all the languages which have this Conjunctive, forms of the type are found in connexion with an unthematic Indicative; and it may be assumed that in the parent language itself both types of Conjunctive were sometimes used with the same verb, just as many verbs had thematic and unthematic inflexion in the Indicative and elsewhere. Skr. 3<sup>rd</sup> pl. *ād-a-n* Gr. *ἔδ-ω-μεν* Lat. *ed-ā-s* beside indic. Skr. *āt-ti* Lat. *ēst*, cp. ind. Skr. *ād-a-t* (imper. 2<sup>nd</sup> sing. mid. *ad-a-sva*) Gr. *ἔδ-ω* Lat. *ed-ō* Goth. *it-a* from *✓ed-* 'eat'. Skr. *ās-a-t* 2<sup>nd</sup> pl. *as-a-tha* Gr. *ἔ-ω-μεν* beside Skr. *ās-ti* Gr. *ἔσ-τι*, cp. Hom. *ἔ-ο-ν* *ἔ-ο-ι* *ἔ-ών* Lat. *s-u-nt* O.C.Sl. (O.Russ.) *s-qtŭ* from *✓es-* 'to be'. Skr. *ay-ā-s* *ay-a-t* Lat. *e-ā-s* beside indic. *ē-ti* *i-t*, cp. *áy-a-tē* Lat. *e-ō* *e-u-nt* from *✓ei-* 'go'. For the long-vowel Conjunctive from the *s*-aorist, as Skr. *mā-s-a-tāi* Gr. *δειξ-ω-μεν* *ειδέ-ω-μεν* Lat. *es-s-ē-s* *ager-ē-s*, thematic Indicatives like Skr. *ád-dik-ṣ-a-t* Gr. *ἔ-δειξ-ε* *ἔξ-ο-ν* Lat. *dīx-i-t* must be compared (§ 833 p. 369). So for Perfect forms like Skr. *vā-vṛdh-a-ti* Gr. *λελήχη* Osc. *fefacid* 'fecerit' we compare the thematic indic. Skr. *á-ca-kr-a-t* Gr. *ἐ-μέ-μηκ-ο-ν* *μέ-μβλ-ε-ται* Lat. *te-tig-i-t* *vhe-phak-e-d* 'fecit' (§ 854 p. 403 § 865. 2 p. 413, § 866 p. 413 f., § 867. 5, 6, and 7 p. 414 f., §§ 872 f. pp. 420 ff.).

§ 921. Aryan. On the distribution of primary and secondary Personal endings see § 913 p. 462.

Further examples for the normal Conjunctive formation (cp. § 919). Skr. *yáj-a-tē* Avest. *yaz-a-itē* beside *yáj-a-tē* *yaz-a-itē* 'he honours with an offering'. Skr. *bhāv-a-ti* Avest.

2<sup>nd</sup> sing. *bav-ā* O.Pers. *bav-ā-tiy* beside Skr. *bhāv-a-ti* etc. 'becomes'. Avest. *per's-a-iti* O.Pers. *pars-ā-tiy* Skr. *prchā-t(i)* beside Skr. *prchā-ti* etc. 'asks'. Skr. *many-ā-tē* Avest. *many-ē-itē* O.Pers. 2<sup>nd</sup> sing. act. *maniy-ā-hy* beside Skr. *mān-ya-tē* 'thinks'. Skr. *pārāy-a-t(i)* Avest. *pāray-ā-ḥ* beside Skr. *pārāya-ti* 'carries over'; O.Pers. 2<sup>nd</sup> sing. *gauday-ā-hy* from *gud-* 'hide'.

Not uncommonly we find an *ā*-Conjunctive to an unthematic Indicative (cp. § 920); here we must bear in mind that in Aryan the 1<sup>st</sup> persons of the Active and Middle were the same in the two Conjunctive series, 1<sup>st</sup> sing. act. Skr. *-ā* (*-ā-ni*) Avest. *-a* (*-ā-ni*) mid. Skr. and Avest. *-āi*, 1<sup>st</sup> pl. Skr. act. *-ā-ma* mid. *-ā-mahē* (*-ā-mahāi*). (1) Present. Skr. *ās-a-t* Avest. *aṇh-a-iti* 2<sup>nd</sup> sing. *aṇh-ā* beside Skr. *ās-ti* 'is', cp. O.Pers. 3<sup>rd</sup> sing. pret. *aha* i. e. *āha*. Skr. *ay-a-t* Avest. *ay-ā-ḥ* beside Skr. *ē-ti* 'goes', cp. Skr. indic. *āy-a-tē*. Skr. 2<sup>nd</sup> pl. *han-a-tha* Avest. *jan-a-ḥ* beside Skr. *hān-ti* 'strikes, kills', cp. indic. Skr. *han-a-ti* Avest. *jan-a-iti*. Skr. *brav-a-t* Avest. 3<sup>rd</sup> pl. mid. *mrao-a-iṛē* beside Skr. *brāv-i-mi* Avest. *mrao-mi* 'I speak', cp. Avest. indic. *mrao-a-iti*. Skr. *bi-bhar-ā-si* beside *bī-bhar-ti* 'bears', cp. Avest. indic. *bī-bar-a-mi*. Avest. 3<sup>rd</sup> sing. mid. *vōi-vid-ā-itē* beside Skr. part. *vē-vid-āna-s* intens. of *vid-* 'find', cp. Avest. indic. *naē-niž-a-iti* (§ 570 p. 113). Skr. 3<sup>rd</sup> pl. *yunaj-a-n* beside indic. *yu-nāk-ti* 'yokes'. Skr. *kṛ-ṇāv-a-t* Avest. *ker'navā-ḥ* O.Pers. 2<sup>nd</sup> sing. *kūnavā-hy* beside indic. Skr. *kṛ-ṇō-ti* etc. 'makes', cp. indic. O.Pers. *a-kū-nav-ata* and the like, § 649 p. 185. (2) *s*-Aorist. Skr. 3<sup>rd</sup> sing. mid. *mās-a-tai* beside indic. 1<sup>st</sup> sing. mid. *ā-mā-s-i* from *mā-* 'measure', Avest. *janh-a-ḥ* beside conj. Gath. *jēnogh-a-itī* from *√ gem-* 'go' (§ 814 p. 352), cp. the thematic Indicative Skr. *ā-dikṣ-a-t* Avest. *a-sas-a-ḥ* § 833 p. 369. (3) Perfect. Skr. *vā-vṛdh-a-ti* beside indic. *va-vārdh-a* from *vardh-* 'to grow', *pa-prc-a-si* beside indic. 3<sup>rd</sup> pl. *pa-prc-ur* from *parc-* 'to mix', Avest. *ānsh-a-ḥ* beside indic. *ānsh-a* from *as-* 'to be', cp. the thematic Ind. Skr. *ā-ca-kr-a-t* etc. § 854 p. 403.



§ 922. In Sanskrit an extra mark was added to the Middle of the *a*-conjunctive; the final *-ē* of those persons that ended therewith was changed to *-āi*, as *-mahē* to *-mahāi*. This came from the 1<sup>st</sup> sing., as *bhārāi*, which was all that had it in pr. Idg. (§ 1042. 1).

First were formed 1<sup>st</sup> pl. *bhārāmahāi* 1<sup>st</sup> dual *bhārāvahāi* instead of \**bhārāmahē* \**bhārāvahē*, to distinguish conjunctive from indicative: so that *bhārāmahāi* answered to indic. *bhārāmahē* as *bhārāi* to indic. *bhārē*.

Next *-mahāi* and *-vahāi* took their place in other conjunctives which had no confusing indicative of the same form, both in *a*- and *a*-conjunctives: e. g. aor. *vōcā-vahāi* beside indic. *a-vōcā-vahi* (*vōcā-vahī*) 3<sup>rd</sup> sing. *a-vōc-a-ta* from *vac-* 'to speak', pres. *kṛṇāv-a-mahāi* beside indic. *kṛ-ṇu-māhē*. Amongst these we find also the older *-mahē* used, as in *kār-a-mahē* beside indic. *á-kṛ-ta* from *kar-* 'to make', *sanīṣ-a-mahē* beside indic. *á-san-iṣ-ṭa* from *san-* 'to get, gain'.

From the 1<sup>st</sup> pl. and dual *-āi* next went on to the other persons of the *a*-conjunctive: 2<sup>nd</sup> sing. *-ā-sāi* beside *-ā-sē*, 3<sup>rd</sup> sing. *-ā-tāi* beside *-ā-tē*, 2<sup>nd</sup> pl. *-ā-dhvāi* beside *-ā-dhvē*, 3<sup>rd</sup> pl. *-ā-ntāi*. In the Rig-Veda two such new forms, but only two, occur: *yaj-a-tāi* from *yaj-* 'to honour with an offering' and *māday-a-dhvāi* from *mad-* 'to enjoy'.

In the 2<sup>nd</sup> and 3<sup>rd</sup> dual the ending *-āi* is not found. Here the endings were *-āithē* *-āitē*, in which *-āi-* on account of the 2<sup>nd</sup> dual *trāsāthē* (indic. *á-trā-s-ta* from *trā-* 'to protect') must doubtless be regarded as also coming from the 1<sup>st</sup> sing. in *-āi*: following *bhārāi* beside indic. *bhārē* were coined the conj. *bhārāithē* and *bhārāitē* beside *bhārēthē* and *bhārētē*. See Bartholomae, Kuhn's Zeitschr. xxvii 214 f.

Some few instances occur of a 3<sup>rd</sup> pl. in *-antāi* beside a thematic indicative; as *vantantāi* beside indic. *vārt-a-ntē* 'vertuntur'. The origin of this form is clear: *bhārāi* *bhārāmahāi* *bhārāvahāi* are distinguished from *bhārē* *bhārāmahē* *bhārāvahē* only by the ending, which suggested a symmetrical relation and caused *-antāi* to arise in place of *-antē*.

§ 923. Greek. Examples in § 919.

The Personal endings are nearly all primary. But in the 3<sup>rd</sup> singular many dialects (amongst others Arcadian and Cyprian) have *-η* for *-η-τ*, as *ἔχη*, instead of *-ηι* (*-η*).

In the 3<sup>rd</sup> pl. *φέρωντι* (Att. *φέρουσι*) *φέρωνται*, *ω* is not regular: there is the same analogical change as in *ἄνται* instead of *\*ἄνται* cp. act. *ἄεισι* (I § 611 Rem. p. 462, IV § 582 p. 123).

In Attic the ending *-ης -η* (§ 987. 1, § 995) ran together with the indic. *-εις -ει*, that is *φέρης* and *φέρεις* had the same pronunciation; so too *φιλής* (for *φιλέης*) and *φιλεῖς* (for *φιλέεις*). And since after contraction *τιμάης τιμάη* became the same as *τιμάεις τιμάει*, namely *τιμάῃς* and *τιμάῃ*, and since the 1<sup>st</sup> sing. in all verbs of this form was the same for both indic. and conj., — *φέρω φιλω τιμῶ μισθῶ* — the result was that the indic. *μισθοῖς μισθοῖ* came to be used as conjunctive too.

By degrees, the *η-ω*-inflexion drove out that with *ε* and *ο* from the Conjunctive Mood; as *ῥομεν* instead of *ῥομεν* (§ 914 p. 463 f.); the latter only held its own where any form was used exclusively in the sense of a future or imperative. This tendency, which, as we saw in § 920 p. 468, may have begun in the parent language, was made easier because the 1<sup>st</sup> sing. act. in both these conjunctive systems ended in *-ω*; as *ἔω* (*ῶ*) beside indic. *ἔσ-τι* (Lat. *er-ō* 3<sup>rd</sup> sing. *er-i-t*), *φέρω* beside indic. *φέρει* (cp. Skr. *ārcā* beside indic. *ārc-a-ti*).

It remains for the present a question whether the reverse be true, and the thematic conjunctive ever took the place of a long-vowel form; see § 914 Rem. 1 p. 464.

§ 924. Italic. The long-vowel Conjunctive drove out the Optative in thematic tenses (e. g. *ag-a-s* is used as equivalent to both *ἄγης* and *ἄγοις*), whilst in Germanic and Balto-Slavonic the Optative won the day (§ 910 p. 460). The short-vowel Conjunctive had a different fate. It remained only as the Future (§ 915 p. 465), and its conjunctive use (Wish, Deliberation, Doubt) passed either to the long-vowel series, for which see below, or to the Optative (as Lat. *s-iē-s s-i-s* beside *es-t*).

The suffixes *-ā-* and *-ē-* are both found, and the personal endings are secondary: Lat. *ag-a-m* (like injunct. — pret. — *-b-a-m*), 3<sup>rd</sup> sing. Osc. *pútíad fuid*, 3<sup>rd</sup> pl. Osc. *putíans herrins* (but Osc. has also 3<sup>rd</sup> sing. *tadait* = *\*-a(i)ē-ti*, § 996).

On the spread of long-vowel forms in place of those with a short vowel, as in Lat. *e-ā-s* *es-s-ē-s* Osc. *fefacid*, see § 920 p. 468.

§ 925. The *ā*-suffix appears in the Present only. To the forms cited in § 919 add the following. Lat. *fu-ā-s* beside indic. *fu-i-t*. Lat. *dīc-ā-s* Osc. *deicans* 'dicant' beside indic. Lat. *dīc-i-t*. Umbr. *emantur* 'emantur'. Lat. *faci-ā-s* Umbr. *fašia* 'faciat' beside indic. *fac-iō*. Lat. *fīni-ā-s* beside indic. *fīni-ō* i. e. *fīni-iō*, *claude-ā-s* beside indic. *claudeō* for *\*claude-iō*, *mone-ā-s* beside indic. *moneō* for *\*mon-eiō*.

In Umbrian *-iā-* spread from *fašia* and like forms to the *ā*-denominatives; hence *kuraia* 'curet' *etaians* 'itent'.

Lat. *e-ā-s* beside indic. *i-t* (like Skr. *ay-ā-t*), whilst in the verbs *est vult ēst* the Optative (*s-iē-s* *s-i-s*, *vel-i-s*, *ed-i-s* beside *ed-ā-s*) added the conjunctive function to their own. The opt. of *i-t* may have been lost by the plural *\*i-i-mos* becoming *\*īmos*, and thus being identical with the indicative.

Remark. The only example of *-ā-* outside the Present would be Lat. *dum-taxat*, if Bréal be right in taking *-taxat* as the conj. of the *s*-aorist of *tangō* (cp. opt. *tax-i-s*): 'donec tetigerit, jusqu'à ce qu'il ait atteint', then 'jusqu'à (et non plus loin)' (Mém. Soc. Ling. v 35 f., Dict. étymol.\* p. 385). As in the whole area of Italic the *s*-aorist has only the *ē*-conjunctive (§ 926), it would be better to take *-taxat* as conj. of an indic. *\*taxō*, Class XX (§ 662 p. 197).

§ 926. The *ē*-suffix appears in all tense Stems.

(1) Present. Lat. (fut.) *fer-ē-s capi-ē-s farci-ēs fini-ē-s*.) Umbr. *heriiei* 'velit' or 'volet' (cp. Osc. *heriiad* 'velit' § 919 p. 467).

The following may also be examples: Osc. *deivaid* 'iuret' for *\*deivā(i)-ē-t*, *tadait* 'censeat' for *\*tadā(i)-ē-ti*, *sakahiter* 'sacretur' for *\*saka(i)-ē-ter*; Lat. *nēs plantēs* for *\*nā(i)-ē-s* *\*planta(i)-ē-s* (indic. 1<sup>st</sup> sing. *nō plantō* for *\*-ā(i)ō*); similarly

1) These forms are wrongly explained in vol. I § 81 Rem. 3 p. 74 f.

*stēs* for *\*sta(i)-ē-s* (indic. 1<sup>st</sup> sing. *stō* for *\*stā-(i)ō*), by analogy of which would come *dēs* (cp. § 946). The difference between *plantēs* and *claudēs finias* — the conj. suffix being in the one group *ē* and in the other *a* — may be explained by remembering that *\*plantā(i)-a-s* must become *\*plantas*, and a confusion with the indicative would result (compare § 930 *sub fin.*); the loss of *\*clauē(i)-ē-s* (cp. *fīni-ē-s plantēs*), because it too would become *\*claudēs* like the indicative. But all these *ē*-forms may be optative: *\*deivā-iē-t* *\*plantā-iē-s*, *\*da-iē-s*. If, as is possible, the origin of these forms is double, the intermingling of Conjunctive and Optative would be due to formal analogy as well as syntax. See § 946.

(2) *s*-Aorist (cp. Skr. *mā-s-a-tai* Gr. *μαῖ-η-ται* εἰδέ-η-ται § 920 p. 468). Lat. *es-s-ē-s in-trā-r-ē-s im-plē-r-ē-s vidē-r-ē-s plantā-r-ē-s* Osc. *fusid* 'foret' Pelign. *upsaseter* 'operaretur' or 'operarentur' (§ 824 p. 362). Lat. *ag-er-ē-s gnōsc-er-ē-s*, Umbr. *ostensendi* 'ostenderentur' for *\*-tend-es-ē-ntēr*, Osc. *herrins* 'caperent' for *\*her-es-ē-nt* (§ 837 p. 374). Lat. *vid-is-s-ē-s totondissē-s dixissē-s* (§ 842 p. 381). Compare the short-vowel conjunctive-futures Lat. *fax-i-tur vider-i-s* Umbr. Osc. *fust* § 915 p. 465.

(3) Perfect Forms (cp. Skr. *vā-ṛjdh-a-ti* Gr. *λε-λήκ-η* § 920 p. 468) occur only in Umbro-Samnite, as in Latin the *s*-Aorist had intruded in place of the perfect forms. Osc. *fefacid* 'fecerit' *hipid* 'habuerit' *fuid* 'fuerit'; Osc. *sakrafir* 'sacraverint' Umbr. *pihafei* 'piaverint'; Osc. *tribarakattins* 'aedificaverint'. See §§ 872 f. pp. 420 f. Most of these forms may be regarded as belonging originally to a thematic aorist, as *fuid* to indic. Lat. *fu-i-t* = Skr. *ā-bhuv-a-t* (see *loc. cit.*); if so they belong to (1).<sup>1)</sup>

§ 927. Keltic. For Irish examples see § 919. Only *-a-* is proved as the Conjunctive suffix. Conjunct flexion, e. g. sing. *do-ber*, *-berae -bere*, *-bera*, pl. *-beram -berid -berat* based

1) In regarding the Umbro-Samnitic forms in this section as *ē*-conj. I follow my pupil G. Bronisch. Meanwhile Bartholomae likewise explains *sakahīter* as a conj. like Gr. *ὁράη-ται* (Stud. Idg. Spr., II 154, 185).

upon *\*ber-ā-m -ā-si -ā-t, -ā-m- -ā-te -ā-nt(o)*; with primary endings, the "absolute" 1<sup>st</sup> sing. *bera* (certainly a new form), 3<sup>rd</sup> sing. *berid*, pl. *bermme berthe berit*. Similarly 3<sup>rd</sup> sing. *dolēcea* for *\*leikyi-ā-t* etc.

With the conj. *-hera* harmonised fully in inflexion *-cara*, beside indic. *no charu* for *\*carā-īð*, cp. Cymr. conj. 3<sup>rd</sup> sing. *caro* pl. *carom caroch caront* with *o* for *a*. The conj. *carā-* may be for *\*carāi-ā-*, but may also be for orig. *carā-* (§ 930).

To the Present in *-enim* (Class XII, § 604 pp. 145 f.) the conjunctive was a series of forms without the nasal suffix. E. g. with *crenim* 'I buy' (from  $\sqrt{\text{grei-}}$ ) and *benim* 'I strike, cut' (beside O.C.Sl. *bi-ti* 'to strike') the conjunctives are 3<sup>rd</sup> sing. *(ni-)cria* for *\*qrii-ā-t* (cp. Gr.  $\eta\theta\iota-\omega-\mu\alpha\iota$   $\eta\theta\iota-\eta-\tau\alpha\iota$ ) and *(fom-)bia* for *\*bhi-ā-t*. Compare Thurneysen in Kuhn's Zeitschr. xxxi 87 f. On the analogy of these, *renim* 'I sell' for *\*pr-nā-* ( $\sqrt{\text{per-}}$ ) had the conj. *ni-ria* made for it; levelling seems to have taken place between these two verbs in the indic. perfect too, though in the reverse direction (§ 878 p. 426 f.).

§ 928. Germanic. Only one form, and that very dubious; the 1<sup>st</sup> sing. *baírau* = O.Icel. *bera* beside the clear optatives Goth. *bairái-s bairái* etc.; this has hitherto been derived from *\*berai-u* Idg. *\*bheroj-ŋ* (cp. I § 142 p. 126), which is called the "only tenable hypothesis" by Kluge, Paul's (Grundr. i 381.<sup>1</sup>) According to Hirt (Idg. Forsch. i 206) the form comes from *\*berō-m* = Lat. *feram*, and *-au* must be pronounced *-aú*, that is as a single sound; similarly Goth. *viljau* O.H.G. *wille* would be derived from *\*uel-i-ā-m*, pr. Germ. *\*uiliŋn*. Compare § 947.

§ 929. Slavonic. 1<sup>st</sup> sing. indic. *bera* for *\*berām* is a conj. form used as future, which displaced the old form in *-ō*

1) I cannot agree to a recent criticism of this explanation, that it violates well established laws of sound. *i* would drop between vowels in unaccented syllables, and *u* may have been contracted with the preceding *a*, before acc. *\*friŋōnd-u* became *friŋōnd*, if this form really so arose (see III § 219 p. 96). Others see the particle *u* in *baírau* (cp. Wiedemann, Lit. Prät. 159).

first in perfect verbs whose present served for the future. Compare § 955 on imperative *pīja-te* and the like.

## II. CONJUNCTIVE WHERE THE INDICATIVE STEM ENDS IN A LONG VOWEL.

### A. Indicative Stem ends in *-ā-*, *-ē-* *-ō-* without gradation.

§ 930. We have here the Conjunctive to our Present Classes X and XI (§§ 578 ff. pp. 118 ff.), that is, stems such as *\*dr-ā-* 'to run' (Skr. *dra-ti* Gr. *ἐ-δρά-ν*), *\*pl-ē-* 'fill' (Skr. *á-prā-t* Gr. *πλή-το* Lat. *im-plē-s*), *\*mṛn-ē-* 'to think' (Gr. *ἐ-μάρη* Lith. *mīnē*), *\*tak-ē-* 'to be silent' (Lat. *tacē-s* O.H.G. *dagē-s*), with which are grouped denominative stems without *-jo-* like Lat. *plantā-* (*plantā-mus*) O.Ir. *carā-* (*no chara-m*) Goth. *salbō-* (*salbō-m*) Lith. *jūstō-* (*jū'stō-me*) Gr. Aeol. *τῖμα-* (*τῖμα-μεν*) (§ 769 pp. 283 ff.) and Perfects like Skr. *ji-jyāú* Gr. *βε-βίη-ται* *βέ-βλη-ται* *τε-τίμα-ται* (§ 847 pp. 390 ff.).

The long vowels of these stems we have already identified with the conjunctive suffixes *-ā-* and *-ē-* (*-ō-*), in § 578 p. 119 f. Thus the Conjunctive and Indicative had here originally the same stem.

In Aryan we get Injunctive forms with Conjunctive use; as Ved. *pr-ā-s* from *pr-ā-* 'to fill'. Forms with primary ending in conj. meaning do not occur, except *prā-si* 'let him fill', which however belongs to the group *vē-ṣi* *kṣē-ṣi* etc. (§ 910 Rem. pp. 459 f.).

Greek. Messen. *-γράφ-η-ντι* conj. of *ἐ-γράφ-η* 'it was written' 1<sup>st</sup> pl. *ἐ-γράφ-η-μεν*, *-σκενάσθ-η-ντι* beside *ἐ-σκηνάσθη* 'was prepared'. Perf. Gortyn. *πέ-π-α-ται* beside indic. *πέ-π-α-ται* 'he has gained, he possesses' from *ἔμ-α-* (II § 117 p. 370 f.), Ther. *πέ-πρ-α-ται* beside indic. *πέ-πρ-α-ται* 'is sold', also conj. Heracl. *οἰκοδόμη-ται* from *οἰκοδομέω* 'I build', Gortyn. *ἐσ-τετέκνω-ται* beside (Att.) *ἐκ-τεκνῶω* 'I beget children'. For clearer distinction between conj. and indic. these forms followed the

analogy of our 1<sup>st</sup> conjunctive class: hence we have on the one hand forms with short conj. vowel, as Hom. *βλή-ε-ται τραπή-ο-μεν γνώ-ο-μεν κι-χῆ-ο-μεν* (cp. *κί-χ-η-μι* § 594 p. 135), and on the other hand forms with long vowel, as Hom. *δαμῆ-ης γνώ-ωσι*,<sup>1)</sup> contracted Att. *τραπή-ς τραπῶ-μεν γνώ-ωμεν, μεμνῆ-ται* Hom. *μεμνώ-μεθα*, Heracl. *ἐπι-βῆ-ν* for *\*-βᾱει* or *\*-βᾱη*.

From Keltic we may cite the conj. of *a*-verbs, as O.Ir. *-cara* for *\*carā-t* (cp. § 927 p. 474), and from Germanic the corresponding conjunctives, such as Goth. *salbō -ō-s -ō -ō-ma -ō-p -ō-na* O.H.G. *salbo -ō-s -o -ō-m -ō-t -ō-n*; also O.H.G. conj. *habē -ē-s -e -ē-m -ē-t -ē-n* beside indic. *habēm -ēs* etc., and Gr. conj. *γράφ-η-νται* beside *ἐ-γράφ-η-μεν*.<sup>2)</sup> Similar Latin forms, *\*plantā-m -a-s* etc., may have been the predecessors of *plantem -ēs* etc.; cp. § 926 p. 473.

### B. Indicative Stem has a Long Final Vowel, with Gradation.

§ 931. We have now to deal with the Conjunctive of Indicative Stems like *\*dhē- \*dh(ə)-* (Skr. *á-dhā-t á-dhi-ta*), *\*dhi-dhē- \*dhi-dh(ə)-* and *\*dhe-dhē- \*dhe-dh(ə)-* (Gr. *τί-θ-ει τί-θ-ε-ται τέ-θ-ε-ται*, Skr. *dá-dhā-ti da-dh-más da-dhāú da-dh-úr*), *\*mṛ-nā- \*mṛ-n(ə)-* (Skr. *mṛ-nā-ti mṛ-n-ānti* Gr. *μάρ-να-ται*).

Two conjunctive types appear to be proethnic; one with the thematic vowel, which we may call the regular type, as Skr. *da-dh-a-tē* beside indic. *dá-dhā-ti*, and one with long

1) It is true there is nothing to prove that the forms Homer really used were not *δαμῆ-ει; γνώ-ουσι*; compare § 934, on conj. like *στή-ης στή-ουσι*. The absence of such forms as *δαμῆ-ωμεν δαμῆ-ητε στή-ωμεν στή-ητε* in Homer is in favour of the short-vowel conjunctive.

2) But how are we to explain Goth. *habau -ais -ai*? That *habēs* in Gothic became *habais* (*ai* = long *ai*) by simple action of regular change is to my mind as little proven as the identity of Goth. *sifais* and Lat. *sifēs*. The student may now refer to Streitberg, Zur Germ. Sprachgeschichte 73 f., who regards *habais habai* as optative with the suffix *-iē*.

vowel, as Skr. *da-dh-a-tāi*, Gr. *ἐνί-στ-ω-μαι ἐνί-στ-η-ται* beside indic. *ἐνί-στα-ται*, Lat. *si-st-ā-s*. The latter are not independent of the fact that the Indicative so often has a thematic side by side with the unthematic series, thus Skr. *da-dh-a-tē* beside indic. *dā-dhā-ti*, *da-dh-ā-tāi* beside indic. *dā-dh-a-ti* (§ 562 p. 110 f.). Cp. conj. *āy-a-t* and *ay-ā-t* and the like (§ 920 p. 468).

### § 932. (1) Thematic Conjunctive Type.

Skr. *da-dh-a-t* 2<sup>nd</sup> dual *dā-dh-a-thas* mid. *da-dh-a-tē* beside indic. *dā-dhā-ti* 'places'. 2<sup>nd</sup> dual mid. *dh-ēthē* 3<sup>rd</sup> sing. act. *prāti-dhat* beside indic. *ā-dhā-t*. *mi-n-a-t* beside indic. *mi-nā-ti* 'lessens, injures'. The forms with secondary personal ending, *da-dh-a-t mi-n-a-t*, may be regarded as injunctive to the thematic indic. *dā-dh-a-ti ā-mi-n-a-nta*; *-dh-a-t* as injunctive is to be compared with *āda-t* (§ 524 p. 88). Avest. 1<sup>st</sup> sing. *xšt-a* (cp. indic. 3<sup>rd</sup> sing. *paiti-štā-p* Skr. *ā-sthā-t* from *√ sta-* 'stare') may come in here as easily as under (2); cp. § 933.

Greek perhaps has specimens of this type of conjunctive in the imperative 2<sup>nd</sup> sing. *ῥέε* (from *ῥίθηναι*) and *ἔε* (*ἔηναι*). If so, their *ε* is not the same as *ε* in *ἔ-ῥε-μεν*, which has displaced *α* = Idg. *ə* (§ 493 p. 53); they would be on the same plane as *οἷ-έ-ς*. On the model of *ῥ-έ-ς* (\**dh-e-s*): *ῥέ-τε* (Idg. \**dhā-te*) *ῥός* beside *ῥότε* would then be coined. Or are *ῥέε* *ἔε* *ῥός* transformates of \**ῥῥς* \**ῥς* \**ῥως* (which would be injunctive like Skr. *dhās dās*) by levelling with *ῥέτω ῥέτε* etc. (§ 909 p. 458).

### § 933. (2) Long-Vowel Conjunctive Type.

Aryan. Skr. *da-dh-a-tāi da-d-a-tāi* beside indic. *dā-dhā-ti* 'places' *dā-da-ti* 'gives', cp. indic. *dā-dh-a-ti dā-d-a-ti* Avest. *da-p-a-iti* (§ 562 p. 111). Skr. *dh-ā-ti d-ā-ti sth-a-ti sth-ā-thas* 2<sup>nd</sup> dual mid. *dhāithē* (cp. § 922 p. 470 on *bhārāithē*), Avest. 2<sup>nd</sup> sing. *d-ā-hī* 3<sup>rd</sup> sing. *d-ā-itī* mid. *d-ā-itē xšt-ā-itē* 3<sup>rd</sup> pl. mid. *d-ā-ntē* beside indic. Skr. *ā-dhā-t ā-dā-t ā-sthā-t* Avest. *dā-p-štā-p*, cp. indic. Skr. *āda-t* (§ 524 p. 88). Skr. 2<sup>nd</sup> pl. *krī-n-a-tha* mid. 3<sup>rd</sup> sing. *krī-n-a-tāi* beside indic. *krī-nā-ti* 'buys' (Whitney, Skr. Gr. § 720), Avest. mid. 3<sup>rd</sup> sing. *per'-n-a-itē ver'-n-a-tā* (with secondary ending) 3<sup>rd</sup> pl. *ver'-n-ā-ntē*



beside indic. *ger'w-na-iti* 'grasps, comprehends', cp. indic. Skr. *mṛ-ṇ-a-ti* (§ 598 p. 141, § 609 p. 149).

On the ending *-a-tai* see § 922 p. 470.

§ 934. Greek. *ἐπί-στ-ω-μαι ἐπί-στ-η-ται* beside indic. *ἐπί-στα-ται* 'understands'. *δύ-ν-ω-μαι* beside indic. *δύ-να-ται* 'can', *μαρ-ν-ώ-μεσθα* (Hesiod) beside indic. *μάρ-να-ται* 'fights', cp. opt. *μαρ-νο-ί-μεθα* (Od. 11. 513) and indic. like *πτάο-νο-μαι* (§ 611 p. 149). Whether the Attic accent be *τίθωμαι* or *τιθῶμαι* (for \**τιθέωμαι*) cannot be decided; the grammarians contradict each other, and the MS. tradition is uncommonly inconsistent; *τί-θ-ω-μαι τί-θ-η-ται* would answer to Skr. *da-dh-a-tai*.

A second type is represented by forms like Messen. *τίθηντι* beside *τίθημι* 'I place', Arcad. *ἱ-στᾶ-τοι* Cret. *ἱθῶντι* beside *ἱ-στᾶ-μι* 'I place, set up', Cret. *δύ-ῃ-μαι* beside *δύ-να-μαι* 'I can', *ῥήγ-νῦ-ται* (Hipponax) beside *ῥήγ-νῦ-μι* 'I break, tear'. I assume that this type is due to imitation of such a conjunctive as *-γράφ-ηντι* (§ 930 p. 475) — observe that in both series the optative formation had become the same in proethnic Greek, as *γραφείην* and *τιθείην*, see § 943; — *τίθηντι* : *τίθημι ἐτίθην* = *γράφηντι* : *ἐγράφην*; *ῥήγνῦται* like *ὑμεναῖον* § 480 p. 29. Cp. Hom. *τιθήμενος* instead of *τιθέμενος* like *κ-χήμενος* *βλή-μενος*, indic. *ἐπί-σσηται* (Il. 16. 243, from *\*-σση-ν*) like *πλῆ-το* 'drew near' (for \**πλᾶ-το*). If Greek once had the conj. *a*-suffix, *ἱ-στᾶ-τοι* might be compared with Lat. *si-ēt-a-s*.

In the same way, and at the same time, with the forms *γράφηντι* etc., Conjunctives like *τίθηντι* came under the influence of *o*- and *ω*-conjunctives. Hom. *στή-ο-μεν στή-ε-τον*, *θή-ο-μεν -θή-ο-μαι*, *δῆ-ο-μεν* and Hom. *στή-ης στή-ωσι*, *φή-ης*,<sup>2</sup>)

1) The forms here treated have been wrongly explained in vol. I

used were *στήεις* *στήουσι*.

Delph. *δῶ-η*, Boeot. *καθ-ιστάει*. Contracted Att. *σῶ στήζ*, *ίσῶ ιστήζ*, *ἔσῶ ἔσπῆζ*, *θῶ θῆζ*, *δῶ δῆζ*.

The relation of *τίθηνται* to indic. *τίθενται* produced in Messenian a conj. *ῥνται* 'sint' beside indic. *ένται*. With this must be grouped Hom. *μετ-έτω* (Il. 23. 47), for which read *μετ-ήτω* and place it parallel to *θῆ-ω ἐφ-ήω*. Compare also § 502 p. 66 on *ἐμὲν* and *ἐμεν ἐμεναι* and § 914 p. 463 on Hom. *ῥομεν*.

§ 935. Italic. Lat. *si-st-ā-s* cp. indic. *si-st-i-t* √ *sta-*; *serās* for \**si-s-ā-s* cp. indic. *se-r-i-t* √ *sē-*; *red-d-ā-s* Osc. *da-dad* 'dedat' (da- prefix) cp. indic. Lat. *red-d-i-t* (the indic. forms *dās dat* may contain the same stem *d-ā-* which with injunctive Flexion could also be indic. pres., cp. § 505 p. 71, § 909 p. 456 f.), Pelign. *di-d-a* 'det' Umbr. *di-rs-a* 'det' cp. indic. Vest. *di-d-e-t* 'dat' √ *dō-*. Compare § 493 p. 53, § 524 p. 88, § 550 p. 106, § 553 p. 107.

Lat. *ster-n-ā-s li-n-ā-s* cp. indic. *ster-n-i-t li-n-i-t*. Compare § 603 p. 145.

§ 936. From Irish we may cite the Mid.Ir. 2<sup>nd</sup> sing. *eba* 'bibas', cp. indic. *ibid* for \**pi-b-e-ti* √ *pō-*. Compare § 539 p. 100, § 554 p. 108.

§ 937. Germanic. In § 507 p. 74 it was pointed out as possible that O.Sax. *dō-m* O.H.G. *tuo-m* 'I do' may represent the stem *dh-ā-* of Lat. *condā-s* and be compared with Lat. indic. *d-ā-s* (§ 935). The same stem as Conj. is seen in O.Sax. 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup> pl. *dua-n* O.H.G. 2<sup>nd</sup> pl. *tuo-t* 3<sup>rd</sup> pl. *tuo-n*.

#### OPTATIVE.<sup>1)</sup>

§ 938. The Optative of the Unthematic Indicative has for suffix in the Singular Active *-iē- -iē-* (Strong form), in the Plural and Dual Active and in the Middle of all numbers *-i-*

1) Th. Benfey, Über die Entstehung und die Formen des idg. Optativ (Potential) so wie über das Futurum auf sanskritisch *syāmi* u. s. w., Abhandl. der Gött. Gesellsch. d. Wiss. xvi 135 ff. J. Schmidt, Die

before consonants and *-i-* *-ij-* before sonants (Weak forms). The Tense Stem had its Weak form. Thus from *\*es-ti* 'is': *\*s-iē-* *\*s-ijē-* 2<sup>nd</sup> sing. Skr. *s-yā-s* *s-iyā-s* O.Lat. *s-iē-s*, *\*s-i-* *\*s-ī-* *\*s-ij-* 1<sup>st</sup> pl. Lat. *s-i-mus* 3<sup>rd</sup> pl. Skr. *s-y-ūr* *s-iy-ūr* O.Lat. *s-i-ent*. But the Optative of Thematic tense stems had in all persons of the Active and Middle *-oi-* before the personal ending; as *\*bhero-i-* (Gr. *φέρου-ς φέρου-τε*) beside indic. *\*bhere-ti* 'bears' from  $\sqrt{bher-}$ . Probably *-oi-* is for *-o-i-* and this *-i-* identical with that of *\*s-i-*; 2<sup>nd</sup> pl. *\*bhero-i-te*: *\*s-i-te* = loc. *\*uoi-ko-i* (Gr. *οἴκοι*): *\*kun-i* (Gr. *κυν-ί* Skr. *śún-i*).

The Personal endings of the Optative are Secondary. Compare § 942 Rem.

In Armenian and Irish<sup>1)</sup> the Optative seems completely dead; in Italic the *oi-* type can no longer be traced. The commingling of optative and conjunctive has been described in § 910 p. 460.

#### I. OPTATIVE WITH *-iē-* *-ī-*.

##### § 939. Pr.Idg.

Class I (§§ 492 ff.). *\*gm-iē-* *\*gm-ī-* beside indic. *\*gém-ti* 'goes' (Skr. *á-gan*): Skr. *gam-yā-t* mid. 1<sup>st</sup> sing. *gm-īya*, A.S. *cyme* (Goth. *\*kumjau*). *\*bhū-iē-* *\*bhu-ijē-* *\*bhu-ij-* beside

ursprüngl. Flexion des Optativs und der auf *ā* auslautenden Präsensstämme, Kuhn's Zeitschr. xxiv 303 ff.

G. H. Müller, De Graecorum modo optativo, Philologus XLIX 548 ff.

Fr. A. Börsch, Hat die lat. Sprache einen Optativus? Marburg 1820.

Loth, L'optatif, les temps secondaires dans les dialectes britanniques, Mém. Soc. Ling., v 133 ff.

F. Bech, Der umgelautete Conjunctivus praeteriti rückumlautender Zeitwörter, Germania xv 129 ff.

Miklosich, Imperativ [in Old Slovenian], Sitzungsber. d. Wien. Akad. LXXXI 132 ff. Oblak, Ein Beitrag zum slavischen Imperativ, Archiv slav. Phil. x 143 ff.

1) "What the British conjunctive, in which *i* seems to be mixt up with *ō* (for *ā*), really is, has not yet been made out. It may be partly derived from an optative of the *s*-aorist." (Thurneysen.) Compare also Loth, Mém. Soc. Ling. v 133 ff.

1<sup>st</sup> pl. Skr. *á-bhū-ma* Gr. *ἐ-φθ-μεν* from  $\sqrt{bhey}$  'be, become': Skr. *bhū-yā-t* O.Pers. *b-iyā*, Gr. Cypr. *φύκη*, 1<sup>st</sup> pl. Avest. *buyamā* i. e. *bviyama* for *\*bhū-ī-ṇm-* (§ 942). *\*uid-īē- \*uid-ī-* beside Skr. *vēd-mi* from  $\sqrt{ueid}$  'see, know' (see § 493 p. 52): Skr. *vid-yā-t* Goth. 1<sup>st</sup> pl. *vit-ei-ma*. *\*s-(i)īē- \*s-ī-*: Skr. *s-yā-t s-iyā-t*, O.Lat. *s-ie-t* 1<sup>st</sup> pl. O.Lat. and class. *s-ī-mus*, O.H.G. 1<sup>st</sup> pl. *s-ī-m*. *\*d-(i)īē- \*d-ī-* beside Skr. *ád-mi* 'esse': Skr. *ad-yā-t* Lat. *ed-ī-mus* O.C.Sl. *jad-i-mŭ*; in all three branches a strong root-form has taken the place of the weak.

Indicatives like *\*é-dhē-t* 'he placed' had two optative types, one having the "unaccented weak grade" of root (*dh-*) and the other the "weak grade with secondary accent" (*dhā-*); compare the two forms of the root in Skr. *d-yā-ti* and *dā-ya-tē*, and the like (§ 707 p. 238). (1) *\*dh-īē- \*dh-ī-*: Avest. *d-yā-ḥ* Osc. *da-did* 'dedat' (*-ī-* from the plural), cp. redupl. Avest. *daidyā-ḥ* mid. *daidī-ta*. (2) *\*dhā-īē- \*dhā-ī-* (cp. *\*bheroī-* and Skr. superl. *sthēṣṭha-s* 'the steadiest, most stable' for *\*stā-īs-to-* II § 81 p. 244). Gr. pl. *ῥεῖ-μεν δοῖ-μεν σταῖ-μεν* (*ῥε- δο-* instead of and *ῥα- \*δα-*, see § 493 p. 53), beside which we have *ῥεῖην δοῖην σταῖην* instead of *\*ῥε-ιη-ν* etc., like 3<sup>rd</sup> pl. *φέρουεν -οἶατο* instead of *\*-ο(ι)εν -ο(ι)ατο* following *φέρουμεν* etc. Skr. pl. *\*dhēma* <sup>1)</sup> *\*dēma* *\*sthēma* (cp. precative *dē-ṣ-ma* § 942), whence sing. *dhēya-t dēya-t sthēya-t* instead of *\*dha-ya-t* etc. (cp. *bhārēyam* following *bhārē-ma* instead of *\*bharāy-am* § 951, and compar. *sthēyas-* following superl. *sthēṣṭha-s* instead of *\*stha-yas-* II § 81 p. 244), and hence again by further analogy pl. *dhēyāma dēyāma sthēyāma* like *syā-ma* following *syā-t* and like Gr. *ῥεῖμεν* following *ῥεῖην* (§ 945); the root syllable in

1) The 2<sup>nd</sup> pl. Ved. *dhātana*, R.V. viii. 56. 5, x. 37. 12 (*-tana* as often instead of *-ta*, see § 1010), probably does not belong to this place; it is either a thematic form like Avest. 2<sup>nd</sup> sing. *dōi-ē* Gr. *ἐνι-δοῖτο -δοίμεθα*, or a new form coined beside *dhēhi* on the analogy of *attana attā* beside *addhi*, *itana itā* beside *i-hi*, *yātana yātā* beside *yāhi*, and the like. The latter view is supported by Pali pres. *dhēmi dhēsi* etc. and *dēmi dēsi* etc., which undoubtedly are new formates complementary to the imperative *dhēhi* and *dēhi*.

the presumptive form *\*dhē-ma* stands to that of 3<sup>rd</sup> sing. mid. *da-dh-i-tá* just as the indic. 3<sup>rd</sup> sing. mid. pret. *á-dhi-ta* to the 3<sup>rd</sup> sing. mid. pres. *dha-t-tē*. It is uncertain whether Lat. *dēs* comes from *\*da-(i)ē-s* (§ 946), and whether O.H.G. 1<sup>st</sup> pl. *stēn* is to be equated with Gr. *σταῖμεν* (§ 947).

Remark. Others assume that Skr. *dhēyā-t* Gr. *ᾄω* come from *\*dhā-iē-t*. With this view, attractive enough at first sight, I cannot agree. The explanation, now put forward again by Jellinek (Beitr. zur Erklärung der germ. Flexion, p. 95), that *bhādrēyam* comes from Idg. *\*bhero-ij-m*, is proved by the evidence of Iranian to be wrong.

Class III (§§ 536 ff.). Skr. *da-dh-yā-t da-d-yā-t* mid. *da-dh-i-tá da-d-i-tá*, O.Sax. pl. *ded-i-n* 'we did' (beside *dād-i-n*), unless this form is to be put with the perfect (§ 886 p. 433), O.C.Sl. *da-d-i-mŭ da-d-i-te* (indic. *da-d-eti* 'dant'); Gr. *τι-θι-ῖ-μεν δι-δο-ῖ-μεν ἰ-στα-ῖ-μεν* like *θι-ῖ-μεν* etc., see above Skr. *bi-bhi-yā-t bi-bhī-yāt* beside *bi-bhē-ti* 'fears', *bi-bhī-yā-t* beside *bī-bhar-ti* 'bears'.

Class VII (§§ 567 f.). Skr. *vē-viṣ-yā-t* beside indic. *vē-vēṣ-ṭi* 'works, is active'.

Classes X and XI (§§ 579 ff.). Skr. *jñā-yā-t* (gramm.) Gr. *γνοῖμεν* for *\*γνω-ι-μεν* from *gn-ē- gn-ō-* 'to learn'. Skr. *mñā-yā-t* 'commemoret' 3<sup>rd</sup> pl. *mñā-y-ur*. Gr. *δοῖμεν* for *\*dōā-ι-μεν* beside *ἔ-δο-α-ν* 'I ran'. Lat. *nēs* for *\*sn-a-ṣ-s*? (s. § 946). — Gr. *κῃξῖμεν* beside *κί-χ-η-μεν* 'we reach, find'.

Class XII (§§ 597 ff.). Skr. 3<sup>rd</sup> sing. mid. *śy-ṇ-i-tá* beside *śy-ṇā-ti* 'shatters'. Gr. *δύρατο* (beside *δύ-ρα-ται* 'is able') for *\*du-nā-i-to* stands to Skr. *śy-ṇ-i-tá* as *τι-θῖτο* (on the accent see § 944) to *dadhītá*.

Class XV (§§ 625 f.). Skr. *yuñj-yā-t* mid. *yuñj-i-tá* beside *yunák-ti* 'yokes'.

Class XVII (§§ 638 ff.). Skr. *ṛ-nu-yā-t* mid. *ṛ-nv-i-tá* beside *ṛ-ṇō-ti* 'excites, sets a-going', mid. *aś-nuv-i-tá* beside *aś-nō-ti* 'attains'. Hom. *δαίνωτο* for *\*dai-nv-ι-το* beside *dai-nv-ται* 'eats', 3<sup>rd</sup> pl. *δαίνατο* for *-nv-ι-ατο* (§ 944). Goth. *kunneima* for *\*kun-nv-i-* Idg. *\*gṇ-nv-i-* beside *kun-nu-m* 'we learn, know'.

Class XIX (§ 656). Skr. *dviṣ-yā-t* beside *dvēṣ-ṭi* 'hates'.

s-Aorist (§§ 811 ff.). Skr. mid. *dikṣ-i-ta* beside 1<sup>st</sup> sing. *á-dik-ṣ-i*, Lat. *dīx-i-mus* beside *dīx-i*, √ *deḡk-* 'show'; Skr. mid. *ma-s-i-ta* Idg. \**mṣ-s-i-to*, √ *men-* 'think'; O.H.G. *wiss-i-mēs* 'we knew' must be named here, if *wissun* 'they knew' is to be compared with Gr. *ῥσαν* (§ 827 p. 365). es-Aorist: Gr. *εἰδεῖμεν* 'we should like to know' for \**Feid-es-i-mev* (cp. Lat. *vid-er-i-mus*), *δεῖξαιαν* for -σ-εσ-χ-αν or -σ-εσ-ι-αν see § 944. es-Aorist: Skr. 1<sup>st</sup> pl. mid. *jan-iṣ-i-mahi* beside indic. *á-jan-iṣ-ta* from *jan-* 'gignere', *pyā-s-iṣ-i-mahi* from *pyā-* 'swell'. is-Aorist: Lat. *vid-er-i-mus* for \**uejd-is-i-* beside conj. *vid-er-ō* (cp. Gr. *εἰδεῖμεν*).

Perfect (§§ 843 ff.). \**ue-urt-iḡ- -i-* from √ *uert-* 'vertere': Skr. *va-vrt-yā-t* 1<sup>st</sup> pl. mid. *va-vrt-i-mahi*, Goth. *vaúrþ-ei-ma* (instead of reg. \**vaúrdeima*) O.H.G. *wurt-i-mēs*. \**se-zd-(i)ḡ- -i-* from √ *sed-* 'sedere': Skr. *sēd-yā-t* Avest. *hazd-yā-þ*, cp. Goth. *sēt-ei-ma*. Skr. 3<sup>rd</sup> sing. mid. *iṣ-i-ta* Goth. 1<sup>st</sup> pl. *áig-ei-ma* beside indic. *iṣ-ē áih* 'has something in his power' (§ 848 p. 391).

Often both types, -*iḡ-* and -*oi-*, occur together, just as in the Indicative thematic and unthematic forms are found side by side, and as in the Conjunctive we see both long-vowel type and thematic. Examples are: Gr. *ἔοι* Lith. *tesė* beside *ei-mi* *es-mi* 'I am', Avest. *d-ōi-š* Gr. *ἐπι-δοιτο* beside indic. *dā-þ ē-θ-ε-ro* from √ *dhē-* 'place', Pruss. *dais* 'give' from √ *dō-*, Gr. *μαρτυρίμεθα* beside *μάρ-να-ται* 'fights', *πενόνθαι* beside *πέ-πονθ-α* 'I have experienced'.

§ 940. Aryan. In Sanskrit, the -*yā-* of the sing. active is invariable for active plural and dual forms that have a personal ending with initial consonant; as *s-yā-ta* instead of \**s-i-ta* (Lat. *s-i-tis*), *jñā-yā-ta* instead of \**jñāi-ta* (Gr. *γνοί-τε*); in the Middle it is invariably absent. The same relation may be seen in Indicative stems like *dhā-* (Idg. \**dhē-*): as *va-vrt-yā-t* *va-vrt-yā-ta* mid. *va-vrt-i-ta*, so *á-dā-t* *á-dā-ta* mid. *á-di-ta* (§ 495 p. 55). In Avestic -*yā-* preponderates for the plural active, as Gath. *īyā-tā* = Skr. *syā-ta*; but -*i-* seems to occur, as in *sruv-mā* i. e. *sruv-i-mā* beside imper. *srao-tū* = Skr. *śrō-tu* from √ *kley-* 'hear'.

Instead of the Skr. ending *-iya* of the 1<sup>st</sup> sing., as *va-vṛt-iy-a*, we should expect *-ya* or *-iya* following the *-y-ur -iy-ur* of the 3<sup>rd</sup> pl. active; indeed, the MS. *ī* of the Veda must often be read short for metrical reasons, as in *īṣiya* and *rāṣiya* Rig.-V. vii. 32. 18, and Avestic regularly has *tanuya* i. e. *tanv-iy-a* (Bartholomae, Handb. § 91 b p. 40). This *-ī-* came from the other middle forms; similarly we have *bhārēyam* following *bhārē-ṣ* etc., instead of *\*bharay-am* or *\*bharāy-am* (§ 951).

More examples to add to those given in § 939:

Class I. Skr. *kr-iyā-t* beside *á-kar* 'he made', *ḍir-yā-t* = *\*ḍī-ṣ-t* beside *á-dar* 'he split, burst' (cp. below, Class VII Avest. *dar°-dairya-ḥ*), mid. *ur-ī-ta* beside *á-vṛ-ta* 'he chose'. Avest. *jam-yā-ḥ* O.Pers. *jam-iyā* with *jam-* instead of *gam-*, which is preserved in Skr. *gam-yā-t* (mid. *gm-īya*) (I § 451 Rem. p. 334), cp. § 939 p. 480. Skr. *han-yā-t* Avest. *jan-yā-ḥ* O.Pers. *jan-iyā* beside Skr. *hán-ti* 'strikes, kills' from *√ ghen-*; pr.Ar. *\*jhan-ṣ-t* instead of *\*ghan-* = *\*ghṇ-*, with which we have the reg. mid. Skr. *ghn-ī-ta* Avest. *yn-i-ta*, but in Skr. following the active also *han-ī-ta* (I § 454 Rem. p. 335, II § 498 p. 57 f.). Skr. *stu-yā-t* mid. *stuv-ī-tá* Avest. *stu-yā-ḥ* beside indic. Skr. *stāu-ti* (*stu-māsi*) Avest. *stao-itī* 'he praises'. Skr. *i-yā-t* beside *é-ti* 'goes'. Skr. *vṛj-yā-t* beside *á-vark* 'he twisted together' (pres. *vṛnák-ti*). Skr. *uṣ-yā-t* Avest. *us-yā-ḥ* beside Skr. *váṣ-ti* Avest. *vas-ti* 'wishes' (*uṣ-māsi us-mahi*). On Skr. *dēya-t* Avest. *d-yā-ḥ* and the like, see § 939 p. 481; on Avest. 2<sup>nd</sup> sing. *da-yā*, below, Class X.

Skr. *brū-yā-t* mid. *bruv-ī-tá* (Avest. *mru-yā-ḥ*) beside *brāv-ī-ti* 'he speaks' Class IX (§ 574 p. 116).

Class III. Skr. *ju-hu-yā-t* mid. 1<sup>st</sup> pl. *jú-hv-ī-mahi* beside *ju-hó-ti* 'offers'. Avest. *daidyā-ḥ daiṣya-ḥ* mid. *daidi-ta daiṣi-ta* like Skr. *da-dh-yā-t da-d-yā-t da-dh-ī-tá da-d-ī-tá*, § 939 p. 481.

Class VII. Avest. *dar°-dairya-ḥ* beside indic. Skr.

1) On the active singular forms with *-ī-*, like *sāhīḥ*, which used to be wrongly taken as optative, see Bartholomae, Stud. Idg. Sprachg. II 157, 169.

*dār-dar-ti* intens. of *dar-* 'to split'; the ground-form may be *\*-dā-īē-t*, see § 568 p. 112.

Class X. Skr. *yā-yā-t* beside *y-ā-ti* 'goes'. Avest. *pā-yā-ḥ* from *pā-* 'protect' (§ 588 p. 129). The forms Skr. *mnēyā-t jñēyā-t* beside the regular *mna-yā-t jñā-yā-t* (§ 939 p. 482) are adformates of such as *dhēyā-t sthēyā-t* (Class I), just as Skr. *jyēṣṭha-s* 'the mightiest' beside comp. *jyā-yas-* is an adformate of *sthēṣṭha-s* (II § 81 p. 244); compare the precative *jñēṣam*, § 942. Levelling in the reverse direction is shown by Avest. *dā-yā-ḥ* beside *d-yā-ḥ*.

Class XII. Skr. mid. *pr-ṇ-ī-tā* beside *pr-ṇā-ti* 'fills'; act. *pr-ṇī-yā-t* with the same *-ī-* as indic. *pr-ṇī-mās*, see § 597 p. 141.

Class XV. Skr. *rundh-yā-t* mid. *rundh-ī-tā* beside *runādh-mi* 'I hold back, stay'. Avest. *meraṣ-yā-ḥ*, see § 626 p. 162.

Class XVII. Skr. *kṛ-ṇu-yā-t* mid. *kṛ-ṇv-ī-tā* Avest. *ker'-nu-yā-ḥ* beside *kṛ-ṇō-ti ker'-nao-iti* 'makes, does'. Skr. *aś-nu-yā-t aś-nuv-ī-tā* Avest. *aś-nu-yā-ḥ* beside *aś-nō-ti aś-nao-iti* 'attains'. Avest. 1<sup>st</sup> sing. mid. *tanuya* i. e. *tano-iy-a* (beside Skr. *tanvīy-ā*), see p. 484.

*s*-Aorist. Skr. 1<sup>st</sup> pl. mid. *dhuk-ṣ-ī-māhi* from *duh-* 'to milk', 1<sup>st</sup> sing. mid. *di-ṣ-īy-a* from *dā-* 'divide, share'; Avest. *diṣyā-ḥ* from  $\sqrt{\text{deik-}}$  'to show, point' from a ground-form *\*dik-s-īē-t*, cp. Skr. mid. *dik-ṣ-ī-ta*. On the intrusion of the strong root in Skr., as *mā-s-ī-māhi* beside *mā-s-īy-a*, see § 815 p. 353. The *iṣ-* and *siṣ-*aorist in Sanskrit: *ruc-iṣ-īy-a* and *rōc-iṣ-īy-a* from *ruc-* 'to shine', *sah-iṣ-ī-mahi* and *sāh-iṣ-ī-māhi* from *sah-* 'to overcome', *vā-siṣ-īy-a* from *van-* 'to gain'. Optatives from sigmatic aorist are in Sanskrit only found in the middle voice, and the 2<sup>nd</sup> and 3<sup>rd</sup> sing. show regularly the precative form, as *mā-s-ī-ṣṭhās mā-s-ī-ṣṭa van-iṣ-ī-ṣṭa yā-siṣ-ī-ṣṭhās* (§ 942).

Perfect. Skr. *ja-gam-yā-t* Avest. *jaymyam* i. e. *ja-ym-iyam* beside indic. Skr. *ja-gām-a* from  $\sqrt{\text{gem-}}$  'go'. Skr. *ri-ric-yā-t* beside *ri-rēc-a* from *ric-* 'let loose'. Avest. *vaonyā-ḥ* beside



indic. 3<sup>rd</sup> pl. *vaon-ar\** from *van-* 'to gain', O.Pers. 3<sup>rd</sup> sing. *ca-xr-iyā* from *kar-* 'to make'.

§ 941. According to Bartholomae, Avestic has in the 1<sup>st</sup> pl. active forms with *-ama* for *-yme*: *jam-y-ama* (the 3<sup>rd</sup> sing. is *jam-yā-ḥ*, § 940 p. 484), *buyamā* i. e. *bo-iy-amā* (cp. *tanuya* § 940 p. 434) beside O.Pers. *biyā* for *\*b(v)-iyā-t* (Avest. 2<sup>nd</sup> sing. *buyā* 3<sup>rd</sup> sing. *buyā-ḥ* may also be derived from *bo-iyā-*, because of the Avestic mode of spelling). Following *buyama* we have 2<sup>nd</sup> pl. *buya-ta*: perhaps 2<sup>nd</sup> pl. *daya-ta* springs from 3<sup>rd</sup> sing. *dayā-ḥ* in the same way. A similar explanation is given of Skr. *duhīyā-t* beside 3<sup>rd</sup> pl. *duhīyān*; perhaps the *i* of this 3<sup>rd</sup> pl. may be accepted as evidence that *-ī-ma* and *-ī-ta* once existed in the Sanskrit language (cp. middle *-īy-a* following *-ī-thas* etc.). See Benfey, Abh. Gött. Gesellsch. Wiss. xvi 182 f., 197; J. Schmidt, Kuhn's Zeitschr. xxiv 318; Bartholomae, *ibid.* xxix 274 f.

§ 942. The "Precative", as it is called, is a mood peculiar to Sanskrit. This is a optative with *-s-* between mood-suffix and personal ending;<sup>1)</sup> in the middle, the 1<sup>st</sup> persons and the 3<sup>rd</sup> pl. could not take this form. Examples are act. sing. 1<sup>st</sup> *bhū-yā-s-am* 2<sup>nd</sup> and 3<sup>rd</sup> *-yā-s* (2<sup>nd</sup> *\*-yā-s-s* 3<sup>rd</sup> *\*-yā-s-t*) pl. *-yā-s-ma -yā-s-ta -yā-s-ur*, mid. sing. 2<sup>nd</sup> *muc-i-ṣ-ṭhas mā-s-i-ṣ-ṭhas yā-sis-i-ṣ-ṭhas* 3<sup>rd</sup> *muc-i-ṣ-ṭa* etc.

Beside *ā-da-t* 'gave', 1<sup>st</sup> pl. *dēṣma* i. e. *\*dā-i-s-me* (confirming the assumed *\*dē-ma* = Gr. *δοῖ-μεν*, see § 939 p. 481); 3<sup>rd</sup> pl. *sthē-ṣ-ur* beside *ā-sthā-t*. To this the 1<sup>st</sup> sing. is *dēṣam sthēṣam. jñēṣam* (from *jñā-* 'know'): *dēṣam* = *jñēyā-t*: *dēyā-t*, see § 940 p. 485.

The history and origin of the Precative are as yet unknown. But there must doubtless be a connexion between its *s* and the aorist *s*.

Remark. If the optative suffix is the same as the Root-determinative *i*, described in § 498 p. 61 and § 572 p. 114, it would be obvious to

1) Avest. *tūuyā* is not a precative; see Bartholomae, Kuhn's Zeitschr. xxix 581. On Skr. forms assumed to be precative, which do not have *s* just before the personal ending, see the same, p. 587.

assume the same connexion between Skr. *dē-ṣ-ma* (\**da-i-ṣ-ma*) and Gr. *δο-ῖ-μεν* as between Skr. *d-grah-i-ṣ-ta* and *d-grah-i-t*; Skr. *djāi-ṣ* 'thou didst drive' could be analysed \**aj-ā-i-ṣ*, as the opt. *djē-ṣ* into \**aj-a-i-ṣ*. Then the optative would be an Injunctive to the indicative with *-i*.

§ 943. Greek. Here we see *-iē-* *-i-* always and only after sonant vowels, with which *-i-* is contracted.

The fact that Skr. forms like *vid-yā-t gam-yā-t bi-bhṛ-yā-t da-dh-yā-t ri-ric-yā-t* are missing in Greek as we have it, is easy to explain. The *i* of *-iē-m* *-i-ent* etc. in proethnic Greek, together with the consonant preceding, formed sound-groups which disguised certain parts of the paradigm, and obscured their connexion with the rest. Thus \**ιζην* (\**izōhen*) \**ιδιμεν* beside *οἶδα ἰδ-μεν*, \**κταινην* \**κτανιμεν* beside *ἐκτα-μεν*, \**θισσην* \**τιθιμεν* beside *τί-θη-μι*, \**λελισσην* \**λελιτιμεν* (\**λελιτιμεν*) beside *λέ-λοιπ-α*, the regular forms, would be unrecognisable for the same kin.

§ 944. Class I. Hom. *εἴην* 'sim' for \**έσ-κη-ν* or trisyllabic \**έσ-ιη-ν*, 3<sup>rd</sup> pl. *εἶεν* for \**έσ-κε-ν* or \**έσ-ι-εν* (cp. Skr. *s-iyā-m s-iy-ūr* beside *s-yā-m s-y-ūr*), 1<sup>st</sup> pl. *εἴμεν* for \**έσ-ι-μεν* with intrusion of strong root (cp. § 502 p. 65). El. *εἶα* for \**έη* 3<sup>rd</sup> pl. *συν-εἶαν* possibly for *-εἶαν* answering to the Ion. *εἶεν* (cp. I § 64 p. 51, § 72 p. 63, where *εἶα* must be read and not *εἶᾱ*, and IV §§ 952, 1020.1 a). *εἶ-* in Att. *εἴην εἶεν* is either to be explained by the fact that the Greek ground-forms \**έσιην* \**έσιμεν* were trisyllabic, or else if these were really \**έσκηην* \**έσκεμεν* it must have come from *εἴμεν*, as *θείην* follows *θειμεν* and *φέροιεν* follows *φεροιμεν* (I § 131 p. 118, IV § 939 p. 481).

On *θείην δοίην σταίην* see § 939 p. 481. Of the same sort are *φαιήν φαῖμεν* mid. 2<sup>nd</sup> sing. *φαῖο* from *φη-μι* 'I say'.

Cypr. *φύκη*, see I § 130 p. 118: Skr. *bhū-yā-t*, see § 939 p. 481. Hom. *ἐκ-δῦμεν* (beside *ἐ-δῦ* 'went in' *ἐ-δῦ-μεν*) for \**δνκ-μεν* (like *πταῖμεν γνῶμεν*) stands for \**δν(f)-ι-μεν* or \**δf-ι-μεν*, 3<sup>rd</sup> sing. *δῶη* = \**δνιη* like *σταίη* beside *σταῖ-μεν*. Cp. *δαινῶτο δαινέατο* Class XVII p. 488. Whether Hom. *φθῖτο* (beside *ἐ-φθι-το* 'was destroyed' is regularly descended from \**φθι-ι-το*, which must be assumed as original, is a question; it may have been coined beside *ἐφθιτο* on the analogy of *δοῖτο* to *έδοτο*.

Class III. *τιθείην διδοίην ισταίην* like *θείην* etc., cp. § 939 p. 481. *τιθεῖτο* : Skr. *dadhātā* = *τίθεμεν* : *dadhmās*. If the Gr. Indicative with *σ* need not be regarded as a new formation in Greek (cp. Skr. *dadhi-dhvē ja-hi-mas*), neither need *τιθεῖμεν* *τιθεῖτο* be such; we should then postulate Idg. *\*dhi-dhə-ǵ-* = *\*dhi-dhə-t-*. But in that case the accentuation *τιθεῖμεν διδοῖμεν* etc. (not certain before the Alexandrian period) must be new, and the original accent *\*τίθεμεν \*δίδομεν* etc., as *δύναιτο* shows (see below); the influences at work in the change may have been the accent of *εἰδεῖμεν* for *\*φειδέ(σ)-τ-μεν* (beside *εἰδείην*), *παρ-εῖμεν* for *\*-έσ-τ-μεν* (beside *παρ-εῖην*), and *φιλοῖμεν* for *φιλέομεν* (beside *φιλοίην*, see § 952), and again that of *τιθείημεν* (§ 945). Similarly the accent of *ἐκ-θείμεν ἐκ-δύμεν* and *δαινῶτο* is not original.

Classes X and XI. *δραῖμεν* for *\*δρα-χ-μεν* by I § 611 p. 461, hence *δραίην* instead of *\*δρα-(κ)η-ν* like *σταίην* following *σταῖ-μεν*. Similarly, *γηραίην* beside *ἑ-γήρα-ν* 'I grew old', *βλείην* *βλείμεν* *βαλείην* *βαλείμεν* beside *ἐ-βλη-ν* *ἐ-βάλη-ν* 'I received a missile, was struck', *δοθείην* beside *ἑδόθη-ν* 'I was given', *κίχην* beside *κί-χη-μι* 'I attain, reach', *γνοίην* *γνοῖμεν* beside *ἔ-γνων* 'I learnt', *άλοίην* beside *ἑάλω-ν* 'I was caught'. Again Lesb. *φιλείην* beside *φίλη-μι* 'I treat as a friend', El. *σῦλαίη* beside *σῦλαμι* 'I rob', and on the same principle we explain *στεφανοίην* etc.

The Middle formation *ἐμ-πλήτο* (beside *πλή-το* 'filled itself') is to be compared with the 3<sup>rd</sup> pl. indic. *ἐμ-πλήντο* : as this is a transformat of *\*-πλεντο* on the analogy of *πλήτο*, so *-πλήτο* is instead of *\*-πλεῖτο* (§ 582 Rem. p. 123). The same is true of *μεμνήμην κεκτεμήην*, p. 489. *-πλήτο μεμνήμην* : *βλείμεν δραῖμεν* = *-πλήντο μέμνηται* : *ἔβλεν(τ) ἔδραν(τ)*.

Class XII. Apparently the only form found is *δύναιτο* from *δύναμι* 'I am able'; *κίρναιην* from *κίρ-νη-μι* 'I mix' and the like may be left out of count. *δύ-να-ι-το* beside Skr. *ḥṛ-ṇ-t-tā* like *\*τί-θ-ι-ι-το* (*τιθεῖτο*) beside *da-dh-t-tā*.

Class XVII. Hom. *δαινῶτο* (beside *δαι-νν-ται* 'eats') for *-νν-το*, like *ἐκ-δύμεν*; instead of *\*-νν(F)-τ-το* or *\*-νF-τ-το*, cp. Skr. *aś-nuv-t-tā kṛ-ṇv-t-tā* § 940 p. 485. 3<sup>rd</sup> pl. *δαινῶατο* = *-ννι-ατο*, like *δέη* (p. 487).

s-Aorist. εἰδείην εἰδεῖμεν (beside ᾔδεα 'I knew') for \**ἑιδ-*-*εσ-κη-ν* or *-εσ-ιη-ν* and *-εσ-ῖ-μεν*, cp. Lat. *vid-er-i-mus*; Att. εἰδείην is to be explained in the same way as εἶην, page 487. On the optative of εἶμι 'I go' see § 836 p. 372 f.; the form ἰείην Il. 19. 209 may, like Plato's δεδιείην, be an adformate of εἰδείην, cp. ἰέναι δεδιέναι : εἰδέναι.

δειξαι-μι -αι-ς etc. is a new formation following the optative -οι-μι -οι-ς etc., which sprang up when α in the σ-aorist had spread beyond its proper sphere; cp. § 820 p. 357.

It is likely that the forms Hom. Att. δειξείας -ειε -ειαν Arcad. διακωλύσει and τύψοιμεν (only preserved by Choeroboscus Dict. 565. 2, and by him called Aeolic) contain the endings -σεσ-κ-η- or -σεσ-ιη- and -σεσ-ῖ-, see § 836 p. 374. The 3<sup>rd</sup> pl. -ιαν stands to the ordinary -ιεν (εἶεν θεῖεν) as indic. Boeot. παρ-εῖαν to Dor. ᾔην for \*ᾔ(σ)-εν; 1<sup>st</sup> pl. -σοιμεν for \*-σεσ-ῖ-μεν. On the one hand, -σοιμεν occasioned a 3<sup>rd</sup> sing. -σει on the analogy of -σαι : σοιμεν and -οι : οιομεν; on the other, -σειαν produced complementary 2<sup>nd</sup> and 3<sup>rd</sup> sing. -σειας -σειε following indic. -(σ)ας -(σ)ε -(σ)αν, just as Avest. *buya-ta* follows *buyama* and Skr. *duhīyá-t* follows *duhīyám* (§ 941 p. 486).

Remark. For the latter development (-σειας -σειε) there would be a second motive if there ever was a 1<sup>st</sup> pl. in \*-σοισμεν, answering to the Avest. *jam-y-ama* (§ 941 p. 486); -σοισμεν : -σοιμεν as *jam-yama* : *srñmā*. And -σοισμεν would make it easier to understand the 3<sup>rd</sup> pl. -ιαν beside the usual form -ιεν.

Perfect. ἵσταίην ἵσταῖμεν beside ἵσταμεν 'we stand' like ἰσταίην ἰσταῖμεν beside ἵσταμεν. Mid. μεμνήμην (beside μέμνη-μαι Dor. μέμνᾱ-μι 'I remember') κεκτήμην (beside κέκτη-μαι 'I have gained') instead of regular \*μεμναιμην \*κεκτεμην, like indic. 3<sup>rd</sup> pl. μέμνηνται κέκτηνται instead of \*μεμινανται \*κεκτενται, see p. 488.

With perfect stems having a final consonant the thematic optative is always found; as πεπόνθοι.

§ 945. In the Active of the Optative -ιη- constantly passed into the Plural and Dual, as εἶημεν beside ἔμεν, σταίημεν beside σταῖμεν, εἰδείημεν beside εἰδεῖμεν, ἑσταίημεν beside ἑσταῖμεν;

Homer has only one example of this sort, *σταιῖσθαι* Il. 17. 733. Compare Skr. *syd̥ma* instead of \**s-i-ma* following *s-yd̥-t* § 940 p. 483.

§ 946. Italic. O.Lat. *s-ie-m siēs siet s-i-mus sītis s-i-ent* beside indic. *es-t*; in classical Latin the weak stem only is found, and we have *sim sīs* etc. The same levelling is seen in the sister dialects: Umbr. *sir si sei* 'sis' si 'sit' *sins sis* 'sint', Marruc. *pacr-si* 'propitius sis' or 'sit'. Lat. *vel-i-m vel-i-mus* beside *vul-t*, with irregular strong root (cp. Skr. mid. *vur-t-ta*), see § 505 p. 69. Similarly *ed-i-m ed-i-mus* beside *ēs-t* from *✓ed-* 'eat', see § 505 p. 70, § 939 p. 481. The reason why *siem* is the only optative with strong opt. suffix which survives in historical Latin is probably that its *i* carried the word-accent.

On the reason for the loss of the optative of *i-t* see § 925 p. 472.

Osc. *da-did* 'dedat' beside Avest. *d-ya-ḥ*, cp. Marruc. *-si* 'sit'.

Lat. *dem* may be derived from \**da-(i)ē-m*, and *stem* from \**sta-(i)ē-m*; *dēmus stēmus* for \**da-(i)ē-mos* \**sta-(i)ē-mos* should be compared with Gr. *δοίηναι σταιῖναι* (§ 945). Lat. *nem plantem* may come from \*(*s*)*na-(i)ē-m* \**plantā-(i)ē-m*, Osc. *deivaid* from \**deiṽa-(i)ē-t*, cp. § 939 p. 482. But all these forms, as we saw in § 926 p. 472, may be Conjunctive.

*s-Aorist*. Lat. *dixim axim*, see § 824 p. 362. *viderim liquerim totonderim dixerim*, see § 841 p. 378. *amāssim prohibēssim ambīssim*, see § 842 p. 381. On the intrusion of such optative forms into the Future Perfect system, i. e. their Conjunctive, see § 915 p. 465.

§ 947. Germanic. The suffix forms *-i-* had got into the singular in protothnic Germanic, cp. e. g. 3<sup>rd</sup> sing. Goth. *vaurþ-i* O.H.G. *wurt-i* Norse Run. *urþ-i* 'would be' for *-i-þ* as contrasted with Skr. *va-ṛyt-ya-t*, 2<sup>nd</sup> sing. O.H.G. *s-i-s* (O.Icel. *sēr* (= pr. Germ. \**sīz*) 'mayst thou be' as against Skr. *s-yd̥-s*; so in the 3<sup>rd</sup> pl., Goth. *vaurþ-ei-na* O.H.G. *wurt-i-n*

'they would become' Norse Run. *vaxin* 'they would be'. The history of the 1<sup>st</sup> sing. (Goth. *-jau* O.H.G. *-i* O.Icel. *-a*) is still obscure (cp. § 953 on Goth. *nimau*); in explaining Goth. *-jau* let it be remembered that *j* in *viljau* and *j* in *vitjau* seem to be different (see below).

Present. A.S. *cyme* pl. *cymen* (from *cuman* 'to come') would be Goth. *\*kumjau* *\*kumeima*: Skr. *gam-yā-t*, see § 939 p. 480. Goth. *viljau* *vilei-s* etc., cp. Lat. *vel-i-m* § 505 p. 69; the 1<sup>st</sup> sing. *viljau* may with O.H.G. *wille* have been originally 1<sup>st</sup> sing. conj. to indic. O.H.G. *willu* 'I will' = O.C.Sl. *velja*, whose tense stem is also represented by Goth. *viljan* and *viljands* (§ 505 p. 69, § 716 p. 249, § 727 p. 259), cp. § 928 p. 474. O.H.G. *sī* 'I should be' pl. 1<sup>st</sup> *sī-mēs* *sī-m* 2<sup>nd</sup> *sī-t* 3<sup>rd</sup> *sī-n* beside *is-t* 'is': Skr. *s-yā-m* etc., see § 939 p. 481; Goth. *sijau* *sijāis* etc. (like *bairau* *bairais*) is perhaps a transformation of the dissyllabic Idg. *\*s-ijē-m* etc. It is possible, that O.H.G. 1<sup>st</sup> pl. *stēn* *gēn* (sing. 1<sup>st</sup> and 3<sup>rd</sup> *gē* *stē* 2<sup>nd</sup> *gēs* *stēs*) are optative like Gr. *σταῖμεν*.

The following may be counted amongst those parts of the Preterite-Present system which are not really perfect. 1<sup>st</sup> pl. Goth. *vit-ei-ma* O.H.G. *wizz-i-mēs* (Skr. *vid-yā-t*), Goth. *mun-ei-ma*, *ga-daūrseima* O.H.G. *gi-turrīmēs* see § 508 p. 74. Goth. *kunneima* O.H.G. *kunnīmēs* (beside Goth. O.H.G. *kun-nu-m* 'we learn, know' Class XVII) for *\*gŕu-nu-i-* like Skr. *ṛ-ṇo-i-tā*, see § 939 p. 482; similarly O.H.G. *unnī-mēs* beside indic. *an* 'I grant', N.-Ger. *dürne* beside indic. *darn* 'I dare', see § 646 p. 184.

Perfect. Goth. *skat-skāid-ei-ma* O.H.G. *sciad-i-mēs* 1<sup>st</sup> sing. *skat-skāid-jau* *sciadi* beside indic. *skat-skāip* *sciad* 'I divided', similarly Goth. *nēm-ei-ma* O.H.G. *nām-i-mēs* beside *nam* 'I took' etc. Similarly in the weak preterite (§ 907 pp. 453 ff.), as Goth. *nasidēd-ei-ma* O.H.G. *nerit-i-mēs*. On O.Sax. *dedīn* 'they would do' sing. *dedi* (instead of regular *\*did-*) see § 939 p. 482.

The intermingling of 2<sup>nd</sup> sing. opt. and 2<sup>nd</sup> sing. indic. preterite of strong verbs has been discussed in § 893 p. 441 f.

## § 948. Balto-Slavonic.

In Baltic this optative cannot be traced. Pruss. *dais* 'give, let' imper. 2<sup>nd</sup> pl. *daīti* (read *daiti*) doubtless do not go with Gr. *δοῖτε* — *dais* would have to be an adformate of the plural — but are thematic like *jeis jeiti idaiti*, §§ 510 f. pp. 75 f., § 954.

§ 949. Slavonic offers but a few specimens, all with hortative force. O.C.Sl. 1<sup>st</sup> and 2<sup>nd</sup> pl. *jad-i-mŭ i-te* 1<sup>st</sup> and 2<sup>nd</sup> dual *-i-vě -i-ta* beside indic. *jad-ętŭ* 'they eat' (§ 510 p. 76): Skr. *ad-yā-t* Lat. *ed-ī-mus*, see § 939 p. 481. *dad-i-mŭ* etc. beside *dad-ętŭ* 'they give' (§ 546 p. 103 f.): Skr. mid. *da-dh-ī-tā* etc., see § 939 p. 482. *věd-i-mŭ* beside *věstŭ* 'he knows' 3<sup>rd</sup> pl. *věd-ętŭ* with the perfect stem *uoid-*, originally confined to the singular indicative, see § 894 p. 442 f. Side by side with this, from the same root, imperative *vidi-mŭ* 'videamus' etc.; the 2<sup>nd</sup> sing. *vižďi* = Lith. *veizdi*, which must be explained with *vidimŭ*, proves it to be old and to belong to the Idg. present *\*ueid-mi* (§ 493 p. 52, § 510 p. 75); here *ei* = Slav. *i* became the only suffix, as *oi* = Slav. *ě* did in *věstŭ*.

The 2<sup>nd</sup> and 3<sup>rd</sup> sing. to these imperatives are *jažďi dažďi věžďi* and the already mentioned *vižďi*. The ending *-i* makes it probable that these should be derived from genuine imperative forms in *\*-dhi*. Their original shape was *\*ězdŭ* (cp. Skr. *addhi*), *\*dazďi* (cp. Skr. *dēhi daddhi* Avest. *dazdi*) or *\*dadŭ* (= O.Lith. *dūdi*), *\*vēžďi* and *\*vizďi* (= O.Lith. *veizdi*, cp. Skr. *viddhi* Gr. *ῖσθι*). Side by side with these stood the 2<sup>nd</sup> and 3<sup>rd</sup> sing. opt. *\*ēdĭā \*dādĭā* etc. (= orig. *\*ēd-ĭēs \*ēd-ĭē-t*, *\*dōd-ĭēs* etc.). By levelling arose *\*ēd-ĭ \*dadĭ* etc., which became the forms actually found, *jažďi* etc.<sup>1)</sup> Compare I § 547 p. 401,<sup>2)</sup> II § 962. The use of *jažďi* etc. for the 3<sup>rd</sup> singular has a parallel in 3<sup>rd</sup> sing. *pri-jętŭ* for the 2<sup>nd</sup> singular; see § 830 p. 367.

1) That e. g. *ěďi jažďi* are not simply contaminations of *\*ězdŭ* and *\*ědĭā* is shewn by the other Slavonic languages, which imply an older ending *-dĭi*. E. g. Pol. *wiedz*; O.C.Sl. *věžďi* = Pol. *miedza*; O.C.Sl. *mežďa*.

2) Here *\*uežďi* = O.Lith. *reiz(d)i* is a misprint for *\*uizďi* = ...

II. OPTATIVE WITH *-oi-*.

§ 950. The ending in the 1<sup>st</sup> sing. act. is *-oi-ṃ* (§ 976. 3), in the 3<sup>rd</sup> pl. *-oi-ṇt* (1017. 1. *b*).

In all languages which have this optative at all it is a living and creative type.

For pr. Idg. a few examples will suffice. *\*bheroī-* beside *\*bhér-e-ti* 'bears', 2<sup>nd</sup> sing. *\*bheroī-s* 2<sup>nd</sup> pl. *\*bheroī-te*: Skr. *bhārē-ṣ -ta* Gr. *φέροι-ς -τε* Goth. *bairái-s -þ* O.C.Sl. *beri berē-te*; Lith. 3<sup>rd</sup> sing. *te-sukē* beside *sukù* 'I turn'. *\*urgōi-* beside *\*urg-iē-ti* 'works': Avest. *ver'zyaē-ta* Gr. *ῥέζοι-τε* Goth. *vaurk-jái-þ*; Skr. 3<sup>rd</sup> sing. mid. *sphāyē-ta* beside indic. *sphā-ya-tē* 'increases, grows', O.C.Sl. 2<sup>nd</sup> sing. *spěji* 2<sup>nd</sup> pl. *spěji-te* beside *spě-ja* 'I succeed'. Skr. 3<sup>rd</sup> sing. *pytanāyē-t* beside *pytanā-yā-ti* 'he fights', Gr. 2<sup>nd</sup> sing. *τιμάοι-ς τιμῶς* beside *τιμάω* 'I honour', A.S. 3<sup>rd</sup> sing. *sealfie* beside *sealfie* 'I salve, anoint', O.C.Sl. 2<sup>nd</sup> sing. *lākaji* beside *lāka-ja* 'I trick, deceive'.

§ 951. Aryan. For examples see § 950. No examples of this optative occur in Old Persian, certainly a mere accident.

In Skr. 1<sup>st</sup> sing. act. *bhārēyam* 3<sup>rd</sup> pl. act. *bhārēyur* 1<sup>st</sup> sing. mid. *bhārēya* 2<sup>nd</sup> and 3<sup>rd</sup> dual mid. *bhārēyātham bhārēyātām*, *ē* has taken the place of *a* (*\*bharay-am* etc.), coming from the other optative forms (*bhārē-ṣ* etc.); in Avest. we still see 3<sup>rd</sup> pl. act. *baray-en* mid. 1<sup>st</sup> sing. Gath. *vāuray-ā* 3<sup>rd</sup> pl. *baray-anta*.<sup>1)</sup> Compare Skr. *vavṛt-ty-a* instead of *\*vavṛt-y-a* § 940 p. 484, and possibly *duhṛyān* instead of *\*duh-y-an* § 941 p. 486; also *ābhāv-am* instead of *ā-bhuv-am* following *ā-bhū-ṣ* § 497 p. 57.

In the Brahmana and Sutra period verbs in *-aya-ti* sometimes show an opt. middle of the I<sup>st</sup> type, as *vēday-ī-ta* beside *vēdāya-tē* 'gives to know', *kāmay-ī-ta* beside *kāmaya-tē* 'wishes'. These must be connected with participles like *vēdayāna-s* beside

1) If *ā* in open syllables represents Idg. *o* (I § 78 p. 68), we must assume pr. Ar. *\*bharāi-am* *\*bharāi-an*. In Avestic, *ā* will have been exchanged for *a* following the lead of these persons in which *aī* was tautosyllabic. Compare § 939 Rem. p. 482.



*oēdaya-māna-s* and such indic. forms as *dhvanay-i-t* (cp. *á-brav-i-t*, § 574 p. 116). Compare § 789 Rem. p. 321; Bartholomae, Stud. Idg. Spr. II 71, 127.

§ 952. Greek. Examples given in § 950.

On the endings of the 1<sup>st</sup> sing. *-οι-μι -οι-ν* see § 979.3; of the 3<sup>rd</sup> pl. *-οιεν* El. *-οιαν* Delph. *-οιν*, § 1020.1. *b*.

Because of the formal agreement between *σχοῖμεν* (indic. *ἔ-σχ-ο-μεν*) *φιλοῖμεν* (indic. *φιλοῦμεν* for *φιλέομεν*) *μισθοῖμεν* (indic. *μισθοῦμεν* for *μισθόομεν*) on the one hand, and on the other *δοῖμεν* *διδοῖμεν* (indic. *ἔ-δο-μεν* *δί-δο-μεν*), there arose in Ionic-Attic, and in Doric here and there, a new formation for the singular following Type I, *σχοίην* *φιλοίην* *μισθοίην* by analogy of *δοίην* *διδοίην*; but the old singular forms were not discarded (*παρά-σχοιμι* *φιλοῖμι* *μισθοῖμι*); similarly *τιμῶην* beside *τιμῶμεν* (indic. *τιμῶμεν* for *τιμάομεν*). A further consequence of this was the plural series *φιλοίημεν* etc., cp. *σταίημεν* complementary to *σταίην*, § 945 p. 489.

§ 953. Germanic. Goth. *nimái-s* *nimdi* etc. O.H.G. *nemēs* *neme* etc., Goth. mid.-pass. 2<sup>nd</sup> sing. *nimái-zau* 3<sup>rd</sup> sing. *nimái-dau* with the indic. *nima* *nimu* 'I take': Gr. *νέμοι-ς* etc. The A.S. *sealfie* pl. *sealfien* may be compared directly with Skr. *prtanāyē-t* O.C.Sl. *lākaji* (cp. § 781.1 p. 304), but O.H.G. *salbōe* *-ōēs(t)* *-ōēm* etc. beside *salbo* *-ōs(t)* *-ōn* etc. is a new formation (cp. Lith. *pa-darai* § 954), and so is *habēe* *-ēēs(t)* *-ēēm* beside *habe* *-ēs(t)* *-ēm* etc., see § 930 p. 476.

§ 954. Balto-Slavonic.

Lithuanian retains the 3<sup>rd</sup> sing. act. (used also for 3<sup>rd</sup> pl. and dual) and calls it a Permissive; e. g. *te-sukē* 'he may turn' beside indic. *sukù*, *te-ateinē* 'he may come' beside indic. *ei-nù* 'I go', *te-vertē* 'he may turn' for *\*vertižē* (like 2<sup>nd</sup> sing. indic. pres. reflex. *vertē-s* for *\*vertižē-s*, I § 147 p. 131) beside indic. *vercziù*. *te-dūdē* 'he may give' beside indic. *dū(d)-mi* and *dū-du* (§ 546 p. 104) like *tesē* 'he may be' beside indic. *es-mi* and *es-ù* (§ 510 p. 76, § 939 p. 483). The Permissive to the Indic. in *-au* has the ending *-ai* in the old books, as *te-darai* beside *daraū*

'I make'. *te-darai: te-sukē* = 2<sup>nd</sup> sing. indic. *darai-s(i): sukē-s(i)* (§ 991), i. e. the optative suffix *ē* (*ai*) is added to indic. stems in *-o* (*-ā*) just in the same way as O.H.G. *salbōe* is formed on the analogy of *bere* (§ 953). We also find 1<sup>st</sup> pl. *pa-praszaim* (*pa-praszaū* 'I beg for, win over') and 2<sup>nd</sup> pl. *žinait* (*žinaū* 'I know'); Bezzenberger, *Zur Gesch. der lit. Spr.*, 223. Furthermore, the *oi-* optative is a living type in Prussian, where it is used for the Imperative; e. g. *imais immeis* 'take thou' 2<sup>nd</sup> pl. *imaiti*, *en-gaunai -gaunei* 'let him receive'; to compare with Lith. *tesē* we have 2<sup>nd</sup> pl. *seiti* 'be ye', and again *jeis* 'go thou' pl. *jeiti* like Gr. *ῥος* (§ 511 p. 77), *idaiti ideiti* 'esset' beside Lith. *ėdu* (§ 510 p. 76), *dais* 'give thou' 2<sup>nd</sup> pl. *daiti* like Avest. *dōi-s* (§ 948 p. 492). Similarly in Lettic 2<sup>nd</sup> pl. *meti-t* 'throw ye' *we'łai-t* 'pull ye' *mafgāj-t* 'wash ye' *lūkūji-t* 'look ye'.

§ 955. The same optative type, like the other (§ 949 p. 492), is used for the Hortative (Imperative) in Old Church Slavonic. Sing. 2<sup>nd</sup> and 3<sup>rd</sup> *beri* (I § 84 p. 82) pl. 1<sup>st</sup> *berē-mū* 2<sup>nd</sup> *-ē-te* dual 1<sup>st</sup> *-ē-vē* 2<sup>nd</sup> *-ē-ta* from *berq* 'I carry, bear', *ději -ji-mū -ji-te* etc. (I § 84 p. 82) from *děja* 'I lay'. On the root syllable in *řici řici p̃ci řizi* see § 534 p. 95 f.

Along with forms having *-ji-* = *-joi-* we get in the Old Bulgarian literature forms with *-ja-* for *-jē-* (cp. *sto-jati* for *\*stojēti* I § 76 p. 66); as *pijate* beside *pijite* from *pija* 'I drink', *glagoljate* beside *glagoljite* from *glagolja* 'I speak' (see Leskien *Handb.*<sup>2</sup> p. 138, Wiedemann *Beitr. zur abulg. Conj.* 27 ff.) So long as no such forms as *\*řicate* instead of *řicēte* are found, it is likely that *ē* comes from forms like *berēte*,<sup>1)</sup> and the group *jē* thus made, along with *jē* = Idg. *ǵē*, became *ja*; more likely than Oblak's view (*Arch. slav. Phil.* x 143 ff.), that we have here orig. *ǵē*, i. e. a conjunctive like Lat. *capiē-s* (§ 926. 1 p. 472), *pijate* standing to *pija* in the same relation as Lat. *capiē-tis* to *capia-m* (cp. § 929 p. 475).

1) Similarly in O.H.G., after *ja* in final syllables had become *je* and then *e*, *-an* was replaced in the infinitive of the First Weak Conj. on the analogy of verbs without *-j*, e. g. *nerian* instead of older *nerien* following *neman* and similar infinitives.

Remark. Present Stems of Class XXVI, as *veljā veliši* inf. *velēti* 'to command' (§ 727 pp. 257 ff.); of Class XXXI, as *goštā gostiši* inf. *gostiti* 'to entertain as a guest' (§ 782 pp. 308 f.); and of Class XXXII, as *vraštā vratīši* inf. *vratiti* 'to turn' (§ 807 pp. 343 f.) all have throughout their imperative -i-: *veli velimū gosti gostimū vrati vratimū*; from the Idg. optative forms which it is necessary to assume we should expect \**velji* \**veljimū* \**gostīji* \**gostījimū* \**vratīji* \**vratījimū*. The forms are then doubtless not optative at all, but Injunctive; and *velimū velite* are related to indic. *velimū velite* as *bādq 'sunto'* (§ 909 p. 458) to indic. *bādaqī (bādaqti)*. Some might wish to take 2<sup>nd</sup> sing. *veli* for orig. \**veli*, i. e. 2<sup>nd</sup> sing. imperative (cp. Lat. *farcī* § 958). Against this may be urged that *chošti* 'wish thou' is sometimes used in sentences which are not imperative (Leskien, Handb.<sup>2</sup> p. 143).

#### IMPERATIVE.<sup>1)</sup>

§ 956. The forms classed as Imperative in the various Indo-Germanic languages have all kinds of different origins. (1) Some of them are Injunctive, as 2<sup>nd</sup> pl. dual Skr. *bhāra-ta bhāra-tam* Gr. *φέρε-τε φέρε-τον*, which were already well established in the imperative system of the parent language; Skr. 3<sup>rd</sup> sing. *bhārat-u* 3<sup>rd</sup> pl. *bhārant-u* (with the particle -u), Gr. 2<sup>nd</sup> sing. mid. *φέρεο φέρον*, O.Ir. 2<sup>nd</sup> sing. mid. *cluinte* 'exaudi' (§ 909 p. 458). (2) Conjunctive forms: Skr. 1<sup>st</sup> sing. pl. and dual, as 1<sup>st</sup> pl. act. *bhārāma* mid. *bhārāmahai*; the 2<sup>nd</sup> and 3<sup>rd</sup> persons of the conj. are dropt in classical Sanskrit, and the 1<sup>st</sup> persons, which are kept, go with the Imperative system. (3) Optative forms: O.C.Sl. *beri berēte* (§ 955 p. 495). (4) Indicative forms: Skr. 2<sup>nd</sup> sing. *vē-ṣi* 'come

1) Thurneysen, Der idg. Imperativ, Kuhn's Zeitschr. xxvii 172 ff. Pott, Über die erste Person des Imperativs, Kuhn-Schleicher's Beitr. i 50 ff.

Aufrecht, Über eine seltne Verbalform [Skr. *addhaki* 'eat away now' from *addhi* and the like], Zeitschr. Deutsch. Morg. Gesellsch., XXXIV pp. 175 f.

I. N. Madvig, De formis imperativi passivi, Kopenh. 1837 = Opusc. ii 239 ff. J. N. Schmidt, Über den lat. Imperativ, Zeitschr. für d. Gymnasialw. 1855 pp. 422 ff. Ch. Thurot, De l'imperatif futur latin, Revue de phil., iv 113 ff.

Kern, Eine Imperativform im Got., Kuhn's Zeitschr. xvi 451 ff.

here', Gr. *λέξαι* 'lay thyself' (§ 910 Rem. p. 459 f.). (5) Forms of the Verb Infinitive: as Lat. 2<sup>nd</sup> pl. *sequi-minī* (II § 71 p. 165). Lastly (6) some are forms which, so far as we can trace them, were never used for anything but the Imperative.

It is the last group, which I call the Genuine Imperative, that will concern us in the following pages. But along with them we shall include some others from the different languages whose origin has not been clearly made out, amongst which may be a few which properly belong to one of the other five groups.

### I. THE PROETHNIC IMPERATIVE.

#### A. Bare Tense Stem as 2<sup>nd</sup> sing. act.

§ 957. The forms which come in this section are such as Gr. *ἵστη* 'place thou' *φίρε* 'bear thou', which like the voc. *ὄψε* *ἴππε* do without any personal suffix whatever. I regard the Idg. forms in *-dhi* (§ 959) and *-tvd* (§ 963) and the Skr. forms in *-sva* (§ 968) as being nothing but extensions of these.

##### (1) Unthematic.

Pr.Idg. Class I. \**eġ* beside \**eġ-ti* 'goes': Gr. *ἔξ-ει*, Lat. *ei* ī *ex-ī*, Lith. *ei-k*. \**dō* beside \**dō-t* 'he gave': Lat. *ce-do* (2<sup>nd</sup> pl. *cette* for \**ce-d(i)-te* § 505 p. 71),<sup>1)</sup> Lith. *dū'-k*, cp. Gr. *δί-δω* (Class III). — Class X. Lat. *hīa* Lith. *šiō-k* 'open thy mouth' beside indic. Lat. *hīa-mus*; on the same principle Lat. *planta* O.Ir. *car* Goth. *salbō* Lith. *dovanó-k* (see below). Lat. *vidē* Lith. *pa-vydē-k* 'invidē' beside indic. Lat. *vidē-mus*. Compare Gr. *ἐγ-κίνα* *πίμ-νη* (Class XI). — Class XVII. Skr. *stṛ-ṇu* Gr. *στόρ-νῦ* beside indic. *stṛ-ṇō-ti* (*stṛ-ṇu-más*) *στόρ-νῦ-σι* 'sternit'.

Aryan. This formation is clear only in the XVII<sup>th</sup> Class in Sanskrit, where however *-dhi* or *-hi* is usually affixed, *ṣṛ-ṇi*

1) Others, not so well, take *ce-do* as a combination of two particles, 'here-wards, hither'. *cette* then is explained as derived from *cedo* as Slav. *na-te* from *na*. See Per Persson *Studia Etymol.*, p. 71.

and *śṛ-ṇu-dhī* 'hear thou' (§ 960); in the later language it was the rule to use *-hi* only where the root ended in a consonant.

In § 600 p. 143 I conjectured that *grhānā* is *\*grhā* + the particle *na*, and that *\*grh-ā* comes from *\*-ṛ*: cp. Att. *κρίμνη*.

Compare further what is said in § 641 p. 180 about *kuru*.

Greek. Class I. Att. *ἔξ-ι*, see above. Epir. Aeol. *πῶ* 'drink thou' beside *πῶ-θι*. — Class III. *δί-δω* (gramm.) 'give thou'. *ἱ-στη* Dor. *ἱ-στᾶ* Lesb. *ἱ-στᾶ* 'place thou'. — Classes X and XI. Dor. *ἐγ-κίκρᾶ*, from *κίγ-κρᾶ-μι* 'I mix'; Att. *πίμ-πρη*, from *πίμ-πρη-μι* 'I kindle' (cp. § 594 p. 135); Lesb. *κίνη* from *κίνη-μι* 'I move', Lesb. *φίλλη* from *φίλλη-μι* 'I treat as a friend', *μύρω* from *μύρω-μι* 'I anoint': cp. Lith. *kėlė-k baľnū'-k*. — Class XII. Att. *κρίμνη* from *κρίμ-νη-μι* 'I hang, let hang' Lesb. *δάμ-νᾶ* from *δάμ-νᾶ-μι* 'I tame, subdue'. — Class XVII. *ὄρ-νῦ* from *ὄρ-νῦ-μι* 'I arouse': Skr. *ṛ-ṇu*.

Latin. *ī ce-do*, see above.<sup>1)</sup> The forms *fer ēs es* can hardly belong to this group; it is more likely they are injunctive like *vel* = *\*uel-s* (§ 505 p. 69). — Class X. Besides *hiā plantā* we have *flā nā domā portā* etc., and by analogy *stā dā*, unless we must take *stā* to be another form of Class I like *ce-do* (cp. Lith. *stó-k*). Others like *vidē* (above) are *implē nē tacē* (on *albē*, see § 958).

Irish. *car* 'love thou' for *carā*, see above.

Germanic. Goth. *salbō* O.H.G. *salbo* 'anoint thou' doubtless from pr. Germ. *\*salbō*, like Latin *plantā* (above). But the forms actually used are not regular; *-ō* has been restored from the other imperative forms which had it, as 2<sup>nd</sup> pl. Goth. *salbō-p* O.H.G. *salbō-t* (cp. 1<sup>st</sup> sing. indic. pres. Goth. *salbō*, § 982. 1). Similarly, O.H.G. *habe* 'have thou' (indic. *habē-m*), with its final vowel assimilated to *ē* in pl. *habē-t*.

Baltic. In Lithuanian, a particle *-ki -k (-kē)* is always affix to these imperatives. Whether the *i*-vowel represents the original ending of the particle is very questionable. It is usual to compare Lat. *ce* (*ce-do si-c*), which is plausible.

1) *fu* in the Arval Song will be another if it means 'be thou', which is doubtful. Compare Pauli, Altital. Stud. iv 29 ff.

Class I. *eĩ-k* indic. *eĩ-ti* 'he goes': Gr. ἔξ-ει Lat. *i. dũ'-k* 'give thou' beside Skr. *á-dā-t* (§ 493 p. 58): Lat. *ce-do. dē-k* 'lay thou' beside Skr. *á-dhā-t* (see *loc. cit.*). *bú-k* 'be thou' beside Skr. *á-bhū-ma* (§ 497 p. 56). — Class X. *ne-bijóki-s* 'fear thou not' beside *bijo-s* 'he fears'. *šió-k* beside *šió-ju* 'I open my mouth': Lat. *hiā* beside *hiā-mus. jó-k* beside *jó-ju* 'I ride'. *kló-k* beside *kló-ju* 'I spread out', *minē-k* beside *minē* 'he remembered'. *lukē-k* beside *lukē-ju* 'I wait a bit'. *dovanó-k* beside *dovanó-ju* 'I present', *pāsako-k* beside *pāsako-ju* 'I relate': cp. Lat. *plantā. kēte-k* beside *kēte-ju* 'I grow hard': cp. Lesb. *qίλη. balnā'-k* beside *balnā'-ju* 'I saddle': cp. Lesb. *μύρω.*

It is the rule that this whole Imperative formation takes its stem from the Infinitive. The reason is that some of the forms belonged to the aorist, whose stem differed from the present stem and agreed with the *s*-future etc., that is, the infinitive stem; the others then conformed to the same type. Hence we have *vartý-k* beside *vartaũ* 'I turn', *jũ'sty-k* beside *jũ'stau* 'I gird'. And similar imperatives are made for all thematic present stems: thus the relation between *dũ'-k* and *dũ'-ti* suggested an imper. *věsk* from *věsti* 'to lead' (pres. *vedũ*), *sũk(k)* from *sũk-ti* 'to turn' (pres. *sukũ*), and so forth.

As the original meaning of these singular forms with *-k(i)* was forgotten, a plural and dual was made from them thus: *dũ'kime dũ'kite dũ'kiva dũ'kita* from *dũ'ki dũ'k*, on which see § 463 Rem. p. 9. *dũ'ki-te : dũ'k(i)* as Lett. *weddi-t : wedd(i)* 'lead thou' (cp. § 958).

#### § 958. (2) Thematic.

Pr.Idg. *\*bhére*, from indic. *\*bhére-ti* 'bears': Skr. *bhára* Armen. *ber* Gr. *φέρε* O.Ir. *beir* Goth. *bair*; Lat. *age*. Skr. *ti-šth-a* Lat. *si-st-e*, indic. *tí-šth-a-ti si-st-i-t* from *√ stā* 'stand'. Skr. *gácha* Gr. *πάσκει* beside *gá-cha-ti* from *√ gem* 'go'. Skr. *namas-yá* indic. *namas-yá-ti* 'honours', Gr. *τέλει τελεῖ* from indic. *τελείω -έω -ῶ*, 'finish thou', for *-εσ-ιω*; Skr. *gā-tu-yá* indic. *gā-tu-yá-ti* 'goes an errand', Lat. *metue* from *metuō*. Skr. *sādāya* Goth. *satei* from indic. *sādāya-ti satji-p* causal

of  $\sqrt{\text{sed-}}$  'sit'; Gr.  $\varphi\acute{o}\beta\epsilon\epsilon$  -ει, indic.  $\varphi\theta\beta\acute{\epsilon}\omega$  -ῶ, 'scare thou off'. s-Aorist: Skr.  $n\bar{e}\text{-}\check{s}\text{-}a$  beside conj.  $n\acute{e}\text{-}\check{s}\text{-}a\text{-}t(i)$  from  $n\bar{i}$ - 'to lead', Gr.  $\omicron\lambda\sigma\text{-}\epsilon$  beside conj. (fut.)  $\omicron\lambda\sigma\omega$  'I will bear or bring' (§ 833 p. 370).

Wherever  $\dot{i}o$ -presents of Class XXVI show -i- and -i- in the indic. pres. beside - $\dot{i}o$ -, these weaker grades are naturally found in the imperative too: Lat. *cape* for \**capi* cp. indic. *capi-s*, *farcī* cp. indic. *farcī-s*, O.H.G. *biti* cp. indic. *bitis* 'thou prayest'; perhaps we may venture to add O.Lith. *girdi*, cp. ind. *girdi-te* 'ye hear'.

Aryan. Skr. *jīva* O.Pers. *jīvā* beside indic. Skr. *jīva-ti* 'lives'; Avest. *ja-sa* (Skr. *gá-cha*) beside indic. *ja-sa-iti* 'goes' (§ 671 p. 203).

Armenian. *ber* 'bring thou' beside *bere-m* aor. *ber-i*, *ac* 'lead thou' beside *ace-m* aor. *ac-i*, *ker* 'eat thou' beside aor. *ker-i*, *tes* 'see thou' beside aor. *tes-i*, *arb* 'drink thou' beside aor. *arb-i*.

Greek.  $\acute{\alpha}\gamma\text{-}\epsilon$  'age' from  $\acute{\alpha}\gamma\omega$  'ago'.  $\kappa\alpha\tau\acute{\alpha}\text{-}\sigma\chi\text{-}$  beside  $\epsilon\text{-}\sigma\chi\text{-}\omicron\text{-}\nu$  pres.  $\epsilon\chi\text{-}\omega$  'I have'.  $\tau\acute{\iota}\mu\alpha\iota$   $\tau\acute{\iota}\mu\alpha$  from  $\tau\acute{\iota}\mu\acute{\alpha}\omega$  -ω 'I honour',  $\delta\omicron\upsilon\lambda\omicron\epsilon$  -ου from  $\delta\omicron\upsilon\lambda\acute{\omicron}\omega$  -ῶ 'I enslave' (cp. Lesb.  $\mu\acute{\upsilon}\rho\omega$  § 957 p. 498). There are a great many bye-forms of this class used as variants to others of the first class (§ 957), when the tense stem ends in - $\acute{a}$  - $\acute{e}$  or - $\acute{o}$ ; as Att.  $\kappa\alpha\theta\text{-}\acute{\iota}\sigma\tau\acute{\alpha}$  Dor.  $\dot{\iota}\sigma\tau\eta$  for \* $\dot{\iota}\sigma\tau\alpha\epsilon$ , Att.  $\tau\acute{\iota}\theta\epsilon\iota$   $\delta\acute{\iota}\delta\omicron\upsilon$ , Att.  $\pi\acute{\iota}\mu\text{-}\pi\lambda\acute{\alpha}$  Dor.  $\pi\acute{\iota}\mu\text{-}\pi\lambda\eta$ , Att.  $\epsilon\sigma\text{-}\beta\acute{\alpha}$  Dor.  $\epsilon\mu\text{-}\beta\eta$  for \* $\beta\acute{\alpha}\epsilon$ ; similarly  $\omicron\mu\nu\text{-}\epsilon$ . Perf.  $\gamma\acute{\epsilon}\gamma\omega\nu\epsilon$  from  $\gamma\acute{\epsilon}\gamma\omega\nu\text{-}\alpha$   $\gamma\epsilon\gamma\acute{\omega}\nu\omega$  'I announce, say'.

The five words  $\acute{\iota}\delta\acute{\epsilon}$   $\lambda\alpha\beta\acute{\epsilon}$   $\epsilon\acute{\iota}\pi\acute{\epsilon}$   $\acute{\epsilon}\lambda\theta\acute{\epsilon}$   $\epsilon\upsilon\rho\acute{\epsilon}$  have kept the accent which they had in pr. Idg. at the beginning of a sentence;  $\lambda\acute{\iota}\pi\epsilon$  and the others with the same accent were originally enclitic (I § 669 p. 532, § 676 Rem. 1 p. 541). The corresponding middle imperatives  $\acute{\iota}\delta\omicron\upsilon$   $\lambda\acute{\iota}\pi\omicron\upsilon$  for - $\acute{\epsilon}\text{-}(\sigma)\acute{o}$  (§ 909 p. 458) have always the accent which they bore as first in a sentence, even when compounded,  $\pi\rho\omicron\sigma\text{-}\lambda\alpha\beta\omicron\upsilon$  (but active  $\pi\rho\acute{o}\sigma\lambda\alpha\beta\epsilon$ ).  $\acute{\iota}\text{-}\theta\iota$  (contrast Skr.  $i\text{-}h\acute{\iota}$ , § 959) is accented on the same principle as  $\lambda\acute{\iota}\pi\epsilon$ , and so too  $\acute{\iota}\sigma\theta\iota$   $\pi\acute{\iota}\text{-}\theta\iota$  and others; but  $\varphi\alpha\text{-}\theta\acute{\iota}$  is like  $\acute{\iota}\delta\acute{\epsilon}$ , and also has a variant  $\varphi\acute{\alpha}\theta\iota$ .

Italic. Lat. *age*. Whether *albē monē* are for *\*albe(i)e* *\*mone(i)e* is as doubtful as the derivation of *albēs monēs* from *\*-eje-s* (§ 788 p. 319).

Lat. *cape* for *\*capi*,<sup>1)</sup> *farci*, see above.

Keltic. O.Ir. *ib* Mod.Cymr. *yf* 'bibe' for *\*(p)i-be*. *lëic* for *\*lëci* or *-i*, see § 702. p. 229, § 719 p. 251.

Germanic. Goth. *batr*; in O.H.G. forms like *hilf* 'help thou' for *\*hilfi* are regular, but e. g. *bir* stands for *\*biri* (I § 662. 2 p. 520). O.H.G. *neri* 'make thou whole' for pr. Germ. *\*naziji*, see loc. cit.; Goth. *nasei* seems to prove that *\*naziji* had not yet become *\*nazī* in pr. Germ. (cp. nom. *frijōndi* I § 660. 2 p. 515).

With Idg. *-i* O.H.G. *hevi* from *heff(i)u* 'I lift', *biti* from *bitt(i)u* 'I beseech', like Lat. *cape* for *\*capi*, see p. 500. But Goth. *hafei* instead of *\*hafi* *\*haf* follows *nasei* etc.

Balto-Slavonic. In O.Lith. and Lett. *-i* is found with presents like Lith. *vedū* 'I lead', as O.Lith. *vedi ved* Lett. *weddi wedd*, *gawilēji* 'I exult, shout for joy'. By the sound laws it is impossible to explain this as the 2<sup>nd</sup> sing. opt. (cp. Pruss. *weddeis*), or to assume that *-i* is *-e* weakened; and therefore

1) The forms *fac* and *dīc dūc* may have elided *-e* as *haec* for *haece* has. But the injunctive *fer* at the same time must have helped to make the short forms current (§ 505 p. 68). [It is true Skutsch has lately derived *fer* from *\*fere*, denying most distinctly that it comes from *\*fer-s* (Forschungen zu lat. Gramm. 55 ff.). But his reasons will not hold water. That *ferre* was originally a thematic present, and that forms like *fert* come by syncope of the thematic vowel, is bare assumption and nothing more. And since the scansion of *ter* as long by Plautus (Baech. 1127) is taken as evidence of the older pronunciation *\*terr* (for *\*ters*, op. Bücheler, Rhein. Mus. XLVI 236 ff.), and since the same poet has *fer* twice short and once long (Mil. 1343<sup>a</sup> *fēr aequo ánimo*), any candid enquirer will see in this a confirmation of my view rather than his. Why the MS. should be corrupt in *fēr aequo ánimo*, and genuine in the two examples of *fēr* short, as Skutsch says, there is nothing to show. If in Plautus' day people spoke *-rr* = *-rs* before a vowel, it is in the first degree probable that this was not done always, but that the form with *r*, which was right before consonants and at the end of a sentence, was sometimes used too. In any case Skutsch ought to prove the contrary before unconditionally supporting the transposition *fēr animo aequo*. To transpose is simple; it does not follow that it is necessary.]



at *-i* is due to the analogy of forms like *girdi*, to the Lat. *cape* (for *\*capī*) *farcti* etc., and are the 2<sup>nd</sup> sing. indic. (*vedi* beside indic. *ved-i* follows indic. *girdi*); and that *veizdi* 'see thou', i. e. helped to make the type current, — perhaps we *di* (§ 962).<sup>1)</sup>

the 2<sup>nd</sup> sing. *veli* (indic. *velja* *veli-ši* inf. *veli-ti*) may possibly be a form like Lat. *farcti*. But it is better to regard it as injunctive, for *\*-i-s*; see 496.

### 3. 2<sup>nd</sup> Person Singular in *-dhi*.

Forms with this suffix occur in Aryan, Greek and Indic; they occur in Unthematic tense stems. Schmidt's *Zeitschr.* xxvii 180) compares Skr. *ádhi* 'auf! geh! 'up! go!'), with its variant *dhi*, like Sanskrit *bhi*; others again compare the infinitive Gr. *-θαι*, which is less credible. In both cases we see that the imperative type described in § 957 is the origin of this.

led to the Weak Stem.

Class I. *\*i-dhi* from *\*e<sub>1</sub>-ti* 'goes': Skr. *i-hí* 'hear thou' Gr. *κλῦ-θι* 'hear thou' from *√kley-* (§ 494 p. 363) beside Skr. *véd-mi* and *véd-a* from 'know' (§ 493 p. 52): Skr. *viddhi* Gr. *ἴσθι*, O.C.Sl. *višdǎ* instead of *\*vizdǎ* (§ 962). *\*z-dhi* Avest. Gath. *zdǎ* Gr. *ἴσθι*. — Class X. Skr. *γῶ-θι* 'learn, know'. — Class XVII. Skr. *śṛ-ñi* from *śṛ-ñō-ti* 'hears', Gr. *ὄμ-νυ-θι* from

change of *\*vede* to *vedi* following *girdi* etc. should be the origin of O.C.Sl. 1<sup>st</sup> pl. pres. *\*nesomū* to *nesemū* following *ib. fin.*; with the effect of *veizdi* which possibly helped, the origin of O.C.Sl. imper. *chošti* 'wish thou' to *chošiti* following

ὄμ-νθ-σι 'swears'. — Perfect. Skr. *mumugdhí* beside *mu-móc-a* from *muc-* 'to let go', Gr. Hom. *δεῖδιθι* i. e. \**δέ-δφι-θι* beside \**δέ-δφι-μεν* 'we feared'.

§ 960. Aryan. Sanskrit has both *-dhi* and *-hi*. Of these *-hi* is used only after sonants, *-dhi* in Vedic after both sonants and consonants, in the later language after consonants only. See I § 480 p. 354, and von Bradke, *Zeitschr. Deutsch. Morg. Gesell.* XL 658 ff., where the variants *-dhi* and *-hi* (*śṛnudhi* and *śṛnuhi* for instance) are convincingly explained as dialectic bye-forms.

Class I. Skr. *i-hi* Avest. *i-đi* O.Pers. *i-dīy* beside indic. Skr. *é-ti* 'goes'. Skr. *stu-hi* Avest. *stuidi* beside indic. Skr. *stau-ti* 'praises'. Skr. *kṛ-dhi* beside ind. *kár-ši* from *kar-* 'to make'. Skr. *ga-dhi* *ga-hi* Avest. *gaidi* beside indic. Skr. *á-gan* from *√gem-* 'go, come'. Skr. *ja-hi* Avest. *jaidi* O.Pers. *ja-dīy* beside indic. Skr. *hán-ti* from *√ghen-* 'strike'; the common ground-form \**jha-dhi* stood instead of regular pr. Ar. \**gha-dhi*, I § 454 Rem. p. 335, and § 480 p. 354; in Sanskrit we also have *han-dhi* by re-formation. Beside Avest. Gath. *zdi*, to which a Skr. form \**dhi* would correspond, Sanskrit has a variant *ēdhi*, for \**az-dhi*, I § 591 p. 447. Similarly, with intrusive strong stem, we have Skr. *addhi* 'eat' (indic. *átti*) from *√ed-*: cp. O.C.Sl. *jaždī* § 962. — Classes III and V. Skr. *dhēhi* and *daddhi* 'place thou' *dēhi* and *daddhi* 'give thou' Avest. *dazdi* beside indic. Skr. *dá-dha-ti* *dá-dā-ti*, see § 540 p. 101. Skr. *ci-ki-hi* beside *ci-kē-ti* 'observes, notices'. *śi-śi-hi* and with strong stem *śi-śā-dhi* and *śi-śā-ti* 'whets, sharpens' (§ 538 p. 98). — Class VII. Skr. *car-kṛ-dhi* beside *car-kar-ti* 'remembers', *nē-nig-dhi* beside *nē-nēk-ti* 'washes'. — Class IX. Skr. *stani-hi* from *stan-* 'to thunder'. *brū-hi* and with strong stem *bravī-hi* beside *bravī-ti* 'speaks'.

Class X. Skr. *vā-hi* beside *vā-ti* 'blows'. Skr. *pā-hi* O.Pers. *pā-dīy* from Ar. *pā-* 'to protect' (§ 588 p. 129).

Class XII. Skr. *śṛ-ñi-hi* from *śṛ-ñā-ti* 'breaks to bits, crushes' (§ 597 p. 141); sometimes the strong stem appears, as *śṛ-ñā-hi*. — Class XV. *bhindhi* from *bhinád-mi* 'I split',

*prædhi* from *prnák-ti* 'mixes, mingles'. — Class XVII. Skr. *kṛ-nu-hí* Avest. *ker'-nū-īdī* beside indic. Skr. *kṛ-ṇó-ti* 'makes', Skr. *dhṛṣ-nu-hí* beside *dhṛṣ-ṇó-ti* 'dares'; cp. § 957 p. 497 f.

s-Aorist. *aviddhi* instead of regular *\*avīdhi* (cp. I § 591 Rem. 1 p. 448), with indic. *āviṣ-am* from *av-* 'to favour, help'.

Perfect. Skr. *pi-prī-hí*, beside indic. *pi-priy-é* pret. *á-pi-prē-t* from *prī-* 'to enjoy'; *śu-śug-dhí* beside indic. *śu-śóc-a* from *śuc-* 'to shine'.

§ 961. Greek. Class I. *ἴσθι* 'be thou': Avest. *zāi*, see I § 593 p. 450, § 626 p. 470; also *ἔσθι* like pl. *ἔστέ*, see § 502 p. 66. *φα-θί* and *φά-θι* (on this double accentuation see § 958 p. 500) from *φη-μι* 'I say': cp. Skr. *bhā-hi* § 495 p. 55. *κῦ-θι*: Skr. *śru-dhí*, cp. *Περι-κλύμενο-ς* § 498 p. 59. *πῖ-θι* 'drink thou' beside conj. (fut.) *πίομαι* § 914 p. 464. — Class III. *ἔλα-θι* 'be thou gracious' for *\*σι-σλα-θι*, also *ἔληθι* on the type of Class XI; like the latter we find another, Hom. *δίδο-θι*.

Class X. *γνῶ-θι* 'learn thou, know'. *ἐλῆ-θι* 'endure thou'. *βῆ-θι* 'go thou' Lac. *κύ-βᾶσι* (I § 495 p. 364). *φάνη-θι* 'appear thou', *πορεύθῃ-τι* 'start off' (I § 496 p. 364). Of this class we have further *στῆ-θι* Lac. *ἄ-τῆᾶσι* (I § 566 p. 423), see § 495 p. 55. — Class XI. *ἔλη-θι*, see above, *ἐμ-νίπληθι* 'imply'.

Class XVII. *ὀρνυ-θι* from *ὀρνύ-σι* 'arouses'.

Perfect. *ἔ-στα-θι* 'stand thou' beside indic. *ἔ-στα-μεν*. *τέ-τλα-θι* 'endure thou' beside *τέ-τλα-μεν*. *πέπισθι* 'trust thou' (Aesch. Eum. 599, MSS. *πέπεισθι*) beside *πέ-ποιθ-α ἔ-πέ-πιθ-μεν*. Of the same kind are *ἐλλαθι* *κέκλυθι*, which I placed in Class V (§ 557 p. 109).

§ 962. Balto-Slavonic. O.Lith. *veizdi veizd* 'see thou' (by this analogy *vėizdmi* instead of *\*veid-mi*) O.C.Sl. *vižďi* instead of *\*vizďi*: cp. Skr. *viddhi* Gr. *ἴσθι*. O.Lith. *dūdi dūd* 'give thou' may be Idg. *\*dō-dhi*, in which case it stands to *dū-k* as Gr. *πῶ-θι* to *πῶ*; O.C.Sl. *dažďi* instead of *\*da-dī* = *dū-di* Class I, or instead of *\*dazďi* like Avest. *dazdi*, Class V. O.C.Sl. *jažďi* 'eat thou' instead of *\*ězďi*: cp. Skr. *addhi*. O.C.Sl. *věžďi* instead of *\*vězďi* beside indic. *vědě* 'knows'. See I § 547 p. 400, IV § 949 p. 492.

C. The Forms with *-tōd*.

§ 963. These forms, for instance *\*uit<sup>o</sup>-tōd* from  $\sqrt{\text{ueid-}}$  'see, know', *\*bhére-tōd* from  $\sqrt{\text{bher-}}$  'ferre', served originally for the 2<sup>nd</sup> and 3<sup>rd</sup> persons of all numbers, as their use in Sanskrit indicates. Thus *-tōd* was properly not a personal suffix at all; probably it was an affix particle, the abl. sing. of the pronoun stem *\*to-* 'this, that' (Skr. *tād*), used in the sense of 'from there, then' (III § 424 p. 348). This theory suits the use of the forms in Sanskrit and Latin, where they are chiefly employed when the command is not to be straightway carried out, but only after a particular point of time, or under certain circumstances. Take, for example, *vānaspātir ādhi tvā sthāsyati tāsyā vittāt* (Tāittirīya-Saṃhitā) 'the tree will fall on thee; beware of it'; *tu velim saepe ad nos scribas; si rem nullam habebis, quod in buccam venerit scribito* (Cic.). Greek also has often this manner of using it; but its use was much restricted by preference for the infinitival imperative.

The basis of this *tōd*-series is the imperative type described under (A), §§ 957 f., of which it may safely be assumed that it was not originally restricted to the 2<sup>nd</sup> singular, which it is most commonly used for: cp. Skr. *kṛ-nu-tad* Gr. *στροφ-νύ-τω* with *kṛ-nu στροφή-νύ*, Lat. *im-ple-tō* with *implē*, Gr. *λή-τω* Lat. *licē-tō* with *vidē*, Skr. *bhāra-tad* Gr. *φτορέ-τω* Lat. *vehi-tō* with *bhāra φέρε vehe*.

Remark. The arguments urged against this view by Windisch do not convince me (Ber. sächs. Ges. der Wiss., 1889 pp. 21 ff.).

## § 964. Pr.Idg.

(1) Unthematic Forms. Stems with gradation have the Weak grade. Class I. Skr. *vittād* Gr. *ῖστω* beside Skr. *véd-mi* and *véd-a* from  $\sqrt{\text{ueid-}}$  'see, know' (§ 493 p. 52). Gr. *ῖσ-τω* Lat. *es-tō* beside *ῖσ-τι es-t*; strong grade in the root as in *ῖσ-τὲ es-te* etc. Gr. *δί-τω* Lat. *da-tō* beside *ῖ-δο-μεν da-mus* from  $\sqrt{\text{dō-}}$ . — Classes III and V. Skr. *dha-t-tad* Gr. *τι-θῆ-τω*

from  $\sqrt{dhē}$  'place', Skr. *da-t-tad* Gr. δι-δό-τω from  $\sqrt{dō}$  'give'. — Class X. Gr. δρᾶ-τω beside ἔ-δρα-ν 'I ran', σβή-τω beside ἔ-σβη-ν 'I quenched', γνῶ-τω beside ἔ-γνων 'I learnt'. Lat. *fla-tō* beside *flā-s*, *im-plētō* beside *im-plēs*. — Class XII. Skr. *pu-nī-tad* beside *pu-nā-ti* 'purifies'. Gr. κίρ-νά-τω beside κίρ-νη-μι 'I mix'. — Class XVII. *κῆ-νυ-tad* beside *κῆ-νό-ti* 'makes'. Gr. ὀμ-νύ-τω beside ὀμ-νῶ-σι 'swears'. — Perfect. Gr. μέ-μά-τω, Lat. *me-men-tō* beside Gr. μέ-μον-α μέ-μα-μεν Lat. *me-min-i* from  $\sqrt{men}$  'think, devise'.

(2) Thematic Forms. Skr. *vaha-tad* Lat. *vehi-tō* beside Skr. *vāha-ti* 'vehit'. Skr. *vōca-tad* Gr. εἰπέ-τω beside *á-vōca-t* Gr. ἔ-ειπ-ε (§ 561 p. 110). Skr. *rākṣa-tad* beside *rākṣa-ti* 'protects'. Skr. *pātaya-tad* beside *pātāya-ti* 'makes fly', cp. Gr. mid. πορεύσθω § 966; Gr. φορέ-τω φορεῖτω from φορέω 'I carry about with me, wear'.

§ 965. Aryan. No examples occur in Iranian. Sanskrit examples are given in § 964.

The forms in Sanskrit are most commonly used for the 2<sup>nd</sup> person singular, but are also found as 3<sup>rd</sup> sing. and as 2<sup>nd</sup> plural.

Since *vaha-tad* as 2<sup>nd</sup> pl. was associated with *vāha-ta* 'vehite', a middle form *vaha-dhvād* was coined to complement *vāha-dhvam* (*vārayadhvād* in the Brahm. is the only form actually found). Compare Gr. *φερέ-σθω* § 966, Lat. *frūminō* § 967.

§ 966. Greek. Further examples (see § 964). *φά-τω* from *φη-μι* 'I say'; *ῖ-τω* from *εἶ-μι* 'I will go'. *ίέ-τω* from *ἱ-η-μι* 'I send forth'. *βλή-τω* from *ἔ-βλη-ν* 'I received a missile, was struck', Lesb. *τιμά-τω* from *τίμα-μι* 'I honour'. *ώθῆ-τω* from *ώθῃ-μι* 'I press, oppress'. *δάμ-νά-τω* from *δάμ-νη-μι* 'I tame'. *δείκ-νύ-τω* from *δείκ-νῶ-μι* 'I show'. *δειξ-ά-τω* from *ἔ-δειξ-α* 'I showed'. *ἑ-στά-τω* from *ἑ-στα-μεν* 'we stand'. *ἀγέ-τω* from *ἄγω* 'ago', *τιμαέτω* *τιμάτω* from *τιμάω* -ᾶ 'I honour'.

On the analogy of act. *φέρειτε*: mid. *φείρεσθαι* a middle *φερέσθω* was coined to complement *φέρω*; this happened in

proethnic Greek. Compare Skr. *vārayadhvād* § 965, Lat. *fruiminō* § 967.

In Greek, the forms with *-τω* and *-σθω* are regularly used for the 3<sup>rd</sup> singular. The active form is used as 2<sup>nd</sup> sing., with the additional suffix *-s* to make the person clear, in the word *ἐλθετως· ἀντι τοῦ ἐλθέ*. *Σαλαμῖνιοι*, a gloss given by Hesychius; cp. § 987. 1. The Corcyrean *φερέσθω*, 3<sup>rd</sup> plural, may be taken as evidence that once *φερέτω* could be used for the plural. But another explanation is possible; that the coincidence of *διδόσθω* 3<sup>rd</sup> sing. and *διδόσθω* = *\*διδονσθω* 3<sup>rd</sup> pl. caused the 3<sup>rd</sup> sing. *φερέσθω* to be used for the plural too.

For the 3<sup>rd</sup> plural, different dialects made new forms on the basis of *-τω* and *-σθω*: *φερέτω-ν φερέτω-σαν φερόντι* (cp. Lat. *feruntō*) *φερόντω-ν φερόντω-σαν* and *φερέσθω-ν φερέσθω-σαν φερόσθω φερόσθω-ν* (for *\*-ονσθω \*-ονσθω-ν*, cp. I § 204 p. 171); see the collections of G. Meyer Gr. Gr.<sup>2</sup> pp. 498 ff. Two remarks must be made here. (1) The origin of *φερέτω-ν φερόντω-ν φερέτω-σαν φερόντι-σαν* is later than the change of *\*-τωδ* to *-τω* (I § 652. 5 p. 498).<sup>1</sup> (2) The forms with *-ντι-(-οντι -οντω-ν -οντιωσαν)*, it may be conjectured, were not based directly upon the indicative *\*bheronti \*ebheront* (Att. *φέρουσι ἔφερον*), but on the imperative-injunctive form *\*bheront* (cp. *σχέ-ς φέρε-τε φέρε-τον φέρε-ο* and 3<sup>rd</sup> pl. Skr. *bhāran bhārant-u* O.C.Sl. *bqda* § 909 pp. 457 f.).

The active and middle endings of the 3<sup>rd</sup> plural did not always correspond; thus Arcadian has act. *-ντω* mid. *-(ν)σθων* (*ζᾱμιόντω ἐπαλασάσθων*). In this and similar cases the explanation is that it was attempted to distinguish the 3<sup>rd</sup> plural from the 3<sup>rd</sup> singular middle.

No certain explanation has been given for Lesb. 3<sup>rd</sup> pl. *φέροντων φέρεσθων*; see the Author, Gr. Gr.<sup>2</sup> 173, Windisch Ber. sächs. Ges. der Wiss. 1889 p. 20, O. Hoffmann Das Präsens der idg. Grundspr. 21. The medio-passive forms *ιστάνθω* and

1) So the identification of Goth. *bairandau* with Gr. *φερόντων* (Hirt, Idg. Forsch. I 206) is wrong.

*ιστάσθων*, found in a late Boeotian and a late Phocian inscription, are re-formates instead of *ιστάσθω* and *ιστάσθων* by analogy of the active forms, made in order to clearly mark the 3<sup>rd</sup> plural.

§ 967. Italic. The forms in *-tōd* (Lat. *-tōd -tō* Umbr. *-tu* Osc. *-tud*) were used for the 2<sup>nd</sup> or 3<sup>rd</sup> singular.

Class I. Lat. *fertō* instead of *\*for-tō* like 2<sup>nd</sup> pl. *fer-te* instead of *\*for-te*; on Umbr. *fertu fertu* 'fer-to' see § 505 p. 69. Lat. *ei-tō itō* Umbr. *etu etu* instead of *\*i-tōd*: Gr. *ἱ-τω*; cp. Lat. *ei-te ī-te* Pelign. *ei-te* instead of *\*i-te* = *ī-re*. Umbr. *futu futu* 'esto': Gr. *φύ-τω*. Lat. *es-tōd estō* Osc. *estud estud* Volsc. *estu*: Gr. *ἔσ-τω*, see § 964.1 p. 505. — Class X. Lat. *nē-tō*, *in-tratō*. Lat. *habē-tō* Umbr. *habetu habitu*, Lat. *licē-tōd licē-tō* Osc. *likītud licitud*. Lat. *portā-tō* Umbr. *portatu*, Osc. *deivatud* 'iurato'. — Perfect. Lat. *me-men-tō*: Gr. *με-μά-τω*. — Thematic. Lat. *agi-tōd* Umbr. *aitu aitu* Osc. *actud* (I § 502 p. 368). Lat. *sūmi-tō* Umbr. *sumtu*. With Idg. *i*, Lat. *faci-tō* Osc. *factud*.

These forms with *-tōd* were made the basis of new formations like the Greek. Here, as in Greek, we find forms with a plural characteristic, and medio-passive forms parallel to the active.

(1) A 2<sup>nd</sup> plural was made in Latin by adding *-te* (*fer-te*), as *fertō-te agitō-te*, which should be compared with Gr. 3<sup>rd</sup> pl. *φερέτω-ν φερέτω-σαν*: first arose *\*fertōtte* (cp. *cette* for *\*ce-dite*), and the double consonant was then thinned because of the preceding long vowel. Again, a 3<sup>rd</sup> pl. with *-nt-* makes its appearance, e. g. *feruntō*, *suntōd suntō*; probably this form has a similar history to Gr. *φερόντω*; the Umbrian formation does not correspond, which makes it very unsafe to suppose that the type originated at a time when Greek and Italic were still united.

3<sup>rd</sup> plural are made by affixing  
p. 98) to *-tu* = *\*-tōd*: *futu-to*  
*-ta* 'eunto' *fertu-ta* 'ferunto'

habetu-tu *habitu-to* 'habento'. This *-tā* may be either Lat. *-te* + some interjection (cp. ἔσσον ᾧ Ar. Lysistr. 350, *καρολο-λυῆαι* ᾧ Aesch. Ag. 1118, *dringā drinc* Parsifal 220. 28), or an ending of the 2<sup>nd</sup> dual (cp. Lith. and O.C.Sl. *-ta*) which, like the dual ending *-tis* in Latin (§ 1013), got into the plural. First *futu* 'esto' had the 2<sup>nd</sup> pl. *futu-to* made for it, like Lat. *agitō-te* from *agitō*, and then since *futu* could be used for 3<sup>rd</sup> singular too, *futu-to* came to be used for the 3<sup>rd</sup> person (cp. O.C.Sl. 2<sup>nd</sup> sing. *jaždī* used also for 3<sup>rd</sup> sing. § 949 p. 492). Still, *-tā*, if it was a dual ending, may have been originally the ending of the 3<sup>rd</sup> person too (cp. O.C.Sl. *-ta* as 3<sup>rd</sup> dual, § 1040); in that case *futu-to* was originally a 3<sup>rd</sup> person form as well as a 2<sup>nd</sup>.

**Remark.** The ending *-tā* seems to all appearance to be used in its proper and original way in VI b 63 (= I b 21. 22) *etato Iiocinur* 'itate Iguvini', and this *-tā* medialised into *-mā* (cp. *-mu(d)* following *-tu(d)*, below) might be seen in *arsmahamo caterahamo Iovinur* 'ordinamini centuriamini Iguvini' VI b 56 = I b 19. But I fear that it is only appearance. For in the first place this medialising would be very remarkable in itself; and secondly, it is natural to suppose that *etato arsmahamo* are shortened by dissimilation from \**ētātū-tō* ('itatote') \**arsmāmū-mō*, and that the latter has caused by analogy the shortening of \**caterāmū-mō* which follows it.

(2) Complementary to *datōd datō dantō* there were formed in Latin *dator dantor*, like *damur* beside *damus*. There also arose a 3<sup>rd</sup> sing. in *-minō* for the 2<sup>nd</sup> pl. in *-minī* (II § 71 p. 165), as *fruiminō fāminō profitēminō* beside *fruiminī* etc.

Corresponding to the latter formation Umbr. has *persnimu persnihimu* 'precamino, supplicato', and the relation of pl. *habituto* 'habento' and *habitu* 'habeto' suggested a plural *persnihimumo* 'pecantor, supplicanto'. On the 2<sup>nd</sup> pl. *arsmahamo caterahamo*, see the last Remark. Osc. *censamur* 'censemino, censetor' shows the mid.-pass. *-r* added to the mid.-pass. *m*-suffix. As regards the relation of the Umbr.-Osc. suffix *-mo-* to Lat. *-mino-*, see II § 72 p. 166.



## II. SOME IMPERATIVE FORMS PECULIAR TO CERTAIN LANGUAGES.

## § 968. Aryan.

(1) The 2<sup>nd</sup> sing. mid. in pr. Ar. *-sya*. Skr. *kṛ-śvā* Avest. Gath. *ker'-švā* beside indic. 3<sup>rd</sup> pl. Skr. *á-kr-ata* from  $\sqrt{\text{ker}}$  'make'. Skr. *īr-śvā* Avest. *ar'-šva* beside indic. Skr. *īr-tē* from  $\sqrt{\text{er}}$  'set in motion' (§ 497 p. 57). Skr. *dhatsvā* Avest. *dasva* for *\*datsva* (I § 473. 2 p. 349) beside indic. Skr. *dá-dhā-ti* from  $\sqrt{\text{dhē}}$  'place'. Skr. *jāni-śva* (from  $\sqrt{\text{gen}}$  'gignere') *vāsi-śva* (from *u-es-* 'clothe') like *stani-hi* (§ 960 p. 503). Skr. *vāha-sva* Avest. *vaza-ruha* beside Skr. *vāha-ti* 'vehit', Gath. *gūša-hva* beside *gūša-itē* 'hears', O.Pers. *pati-paya-uva* 'take care' (I § 558 p. 415).

It can hardly be doubted that this middle form is an extension of the Imperative discussed in §§ 957 f. by means of the reflexive pronoun (III § 438 p. 370 ff.). *-sva* is the form which in Greek is the accusative, *fé f.*

(2) The 3<sup>rd</sup> sing. and pl. mid. in *-ām*.<sup>1)</sup> Skr. sing. *kṛ-ṇu-tām* pl. *kṛ-ṇv-ātām* from *kṛ-ṇō-ti* 'makes', sing. *dhattām* pl. *dadh-ātām* from *dá-dhā-ti* 'places'. Skr. sing. *bhāra-tām* pl. *bhāra-ntām* from *bhāra-ti* 'fert', Avest. sing. *ver'zya-tam* from *ver'zye-iti* 'works', pl. *jase-ntam* (Skr. *gācha-ntām*) from *jasa-iti* 'goes', O.Pers. sing. *varnava-tām* beside Avest. *ver'-nav-a-itē* 'believes' (§ 649 p. 185).

The ending of these forms is connected with that of the Skr. 3<sup>rd</sup> sing. imper. mid. *duh-ām vid-ām śay-ām* and the 3<sup>rd</sup> pl. imper. mid. *duhr-ām*, which again can hardly be treated apart from the form *vidām* which is contained in *vidā cakāra* (§ 896 p. 445); thus we are drawn to see in them verbal nouns

1) *-ām* is also seen in Avest. *ūcam* 'should be proclaimed'. Since in Skr. *-ām* is found only with verbs whose 3<sup>rd</sup> sing. indic. shows the ending *-z* beside *-tē*, it is natural to assume (as my pupil Mr. E. Kleinhaus has pointed out to me) that, say, *duhām* beside *duhē* is due to the analogy of *dugdhām* beside *dugdhē*. *duhré* would then have suggested the 3<sup>rd</sup> pl. *duhrām* (§ 1078.)

used with the imperative meaning. Then e. g. *bhárutām bhárantām* may be a transformation of the injunctive *bhárata bháranta*, completed in proethnic Aryan, on the analogy of *duhām* etc. And, as we have seen already (§ 909 p. 458), the corresponding active forms *bhárat-u bhárant-u* are also based upon the Injunctive.

In Avestic *-tām* passed over to the Optative, as *d-yā-tām* from *dha-* 'to place' (Bartholomae, Ar. Forsch. II 63 ff.).

### § 969. Greek.

(1) The 2<sup>nd</sup> sing. act. of the *s*-aorist in *-σον*, as *δειξον* from *δειξα* 'I showed'. The Syracusan dialect has *-ον* in the thematic aorist as well: *λάβον* (not as Attic, *λαβε*). Its origin is obscure.

(2) Among the possible explanations of the 2<sup>nd</sup> sing. mid. of the *s*-aorist, as *δειξαι* *λέξαι*, two in particular deserve attention. (a) *λέξαι* ('lay thyself') may be the 2<sup>nd</sup> sing. mid. *\*λεκ-σ-σαι*, connected with *λέκτο* for *\*λεκ-σ-το* (§ 820 p. 357), and its primary personal ending may be compared with Ved. 2<sup>nd</sup> sing. act. *वृ-षी* 'come here' and like forms (§ 910 Rem. p. 459 f.). *λέξαι* would be to the injunctive *λέξο*, i. e. *\*λεκ-σ-σο* (also used for imperative), as Skr. *prá-si* 'fill thou' to the imper. injunct. *prá-s*. But since in the speaker's thought *λέξο* was associated with the system *λέκτο* *λέχθαι* etc., *λέξαι* because of its *α* was supposed to go with the *α*-forms *ἐλεξάμην* *ἐλέξατο* etc. (b) The other possibility is that this imperative was a Present form, that e. g. *ἔσσαι* (*√ sed-* 'sedere') was the middle to the Skr. imper. *sát-si* 'place thyself, sit', and *ῥμορξαι* the 2<sup>nd</sup> sing. to Skr. *mṛṣ-ṣṣ*. Association of these with the *s*-aorist was easy when they were so completely isolated. Perhaps — there is nothing to prevent this either — forms of both kinds have been united to form our Aorist Imperative.

§ 970. Germanic. Unexplained forms: Goth. *at-steigadau* 'καταβαίτω', *láusjadau* 'ἑνσάσθω', and *liugandau* 'γαμησάτωσαν'. The explanations offered for these may be seen collected by

Jellinek, Beitr. zur Erklärung der germ. Flexion, pp. 98 ff.; see further p. 507 footnote, and compare the medio-passive optative forms *bairái-zau -dau -ndau* in § 1052.

## SIGNS OF THE PERSONS, AND OF MIDDLE AND PASSIVE VOICE.<sup>1)</sup>

§ 971. The Personal endings served in the original language a double purpose: to distinguish Persons, and to distinguish the Active from the Middle or Passive Voice.

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1) Fr. Müller, Sprachwissenschaftliche Beiträge zur Suffixlehre des idg. Verbums, Kuhn-Schleicher's Beitr. II 351 ff. *Idem*, Zur Suffixlehre des idg. Verbums I, Sitzungsber. d. Wien. Akad. xxxiv 8 ff., II, *ibid.* lxvi 193 ff. G. Curtius, Zur Erklärung der Personalendungen, in his Stud. iv 211 ff. Begemann, Zur Erklärung der Personalendungen, in: Zur Bedeutung des schwach. Präteritums der german. Sprachen 1874 pp. 184 ff. The Author, Zur Geschichte der Personalendungen, Morph. Unt. I 133 ff. Sayce, The Person-Endings of the Indo-European Verb, Techmer's Zeitschr. f. allgem. Sprachw. I 222 ff. P. Merlo, Sulla genesi delle desinenze personali, Rivisti di filol. xii 425 ff., xiii 385 ff., xiv 369 ff. M. Haberlandt, Zur Geschichte einiger Personalausgänge bei den thematischen Verben im Idg., Wien 1882. Windisch, Personalendungen im Griech. und Sanskr., Ber. d. sächs. Gesellsch. d. Wiss. 1889 pp. 1 ff. Bezzenberger, Die idg. Personalendungen *-mā, -tā, -vā*, in his Beitr. II 268 f. E. Sibree, First and Second Persons of the Indo-European Verb, The Academy xxvii (1885) pp. 190 f. Stier, Die 3. plur. praes. indicativi des verbi substantivi, Kuhn's Zeitschr. vii 1 ff. Benfey, Über einige Pluralbildungen des idg. Verbum, Abhandl. d. Gött. Gesellsch. d. Wiss. xiii 39 ff. V. Henry, La 3<sup>e</sup> personne du pluriel du parfait indo-européen, Mém. Soc. Ling. vi 373 ff. Windisch, Über die Verbalformen mit dem Charakter *r* im Ar., Ital. und Kelt., Leipz. 1887 (= Abhandl. der sächs. Ges. d. Wiss., phil.-hist. Cl., x 447 ff.). Misteli, Über Medialendungen, Kuhn's Zeitschr. xv 235 ff. 321 ff. A. Kuhn, Über das Verhältniss einiger secundären Medialendungen zu den primären, *ibid.* xv 401 ff. L. Parmentier, L'origine des secondes personnes *grée(n)u, λεί(n)ου, bhārasē, sequere*, Mém. Soc. Ling. vi 391 ff. H. C. von der Gabelentz, Über das Passivum, Abhandl. der sächs. Gesellsch. d. Wiss. viii 449 ff. Steinthal, Über das Passivum, Zeitschr. f. Völkerpsych. u 244 ff. Herm. Müller, De generibus verbi, Greifsw. 1864.

What the meaning of each particular personal suffix may have been we are not in a position to decide. Some of them may originally have been a personal pronoun affix to the

Aryan. Bartholomae, *Arice: Zur Bildung der 1. sing. praes. act., der 1. plur., der 3. sing. perf. act., Zur Flexion des Conjunctivi, Zur Bildung der 3. plur. praet. act., der 2. und 3. du. med., Kuhn's Zeitschr. xxix 271 ff. Idem, Die 1. sing. opt. med. der thematischen Conjugation [of Aryan], Ar. Forsch. II 65 f. Th. Benfey, Über die Entstehung und Verwendung der im Sanskrit mit *r* anlautenden Personalendungen, Abhandl. der Gött. Ges. d. Wiss. xv 87 ff. J. Darmesteter, Des désinences verbales en *us* et des désinences verbales qui contiennent un *r* en sanskrit, Mém. Soc. Ling. III 95 ff. A. Bergaigne, Des troisièmes personnes du pluriel en *-ram*, *ibid.* III 104 f. Bartholomae, Indisch *āi* in den Medialeausgängen des Conjunctivi, Kuhn's Zeitschr. xxvii 210 ff. A. J. Eaton, The *Ātmanepada* in *Rigveda*, Leipz. 1884. Spiegel, Die 3. Person plur. des perf. red. med. im Altbaktr., Kuhn's Zeitschr. xx 155 f. Bartholomae, Suffix *ai°* und *āt°* in den 3. pl., das Personalsuffix *-tam* im Opt. [in Avestic], Ar. Forsch. II 61 ff.*

Greek. K. Burkhard, Die Personalendungen des griech. Verbums und ihre Entstehung, Teschen 1853. Bollensen, Über die 2. und 3. du. in den historischen Zeiten des Griech., Kuhn's Zeitschr. xliii 202 ff. J. Schmidt, Die Personalendungen *-α* und *-αυ* im Griech., *ibid.* xxvii 315 ff. F. Misteli, Über die erste Pers. Sing. Opt. Act. des Griech., Zeitschr. f. Völkerpsych. xii 25 ff. V. Henry, La finale primaire de 2<sup>e</sup> personne du singulier de voix moyenne en dialecte attique, Mém. Soc. Ling. vi 200 ff. Poppo, De Graecorum verbis mediis, passivis, deponentibus recte discernendis ac de deponentium usu, Frankf. a. d. O. 1827. Heurlin, De significatione verbis Graecorum mediis propria iisdemque a deponentibus discernendis, Lund 1852. L. Janson, De Graecorum verbis deponentibus vetustissimorum poetarum epicorum usu confirmatis, Festprogr. des Thorner Gymn., Thorn 1868. Kowaleck, Über Passiv und Medium vornehmlich im Sprachgebrauch des Homer, Danzig 1887.

Italic and Keltic. J. Rhys, The Passive Verbs of the Latin and the Keltic Languages, Transact. of the Philol. Soc. 1865 pp. 293 ff. H. Zimmer, Über das italo-keltische Passivum und Deponens, Kuhn's Zeitschr. xxx 224 ff.

Italic. Corssen, Osservazioni sulle desinenze personali del verbo italico, Rivista di filol. iv 478 ff. *Idem*, Zur Gestaltung der Personalendungen italischer Verba, in: Beitr. zur ital. Sprachk. pp. 564 ff. Speijer, *tis* 2<sup>e</sup> personne du pluriel, Mém. Soc. Ling. v 189. *Idem*, Désinences moyennes conservées dans le verbe latin (Parfait en *-i* (*-ei*), Singulier de l'impératif en *-re*), Mém. Soc. Ling. v 185 ff. Corssen, Zur ital. Passivbildung, in: Beitr. zur ital. Sprachk. pp. 562 ff. Conway, The Origin of the Latin Passive, illustrated by a recently discovered

verb. Thus a connexion with ancient personal pronouns is in fact possible for the followings endings: in the 1<sup>st</sup> sing. *-m -mi*, cp. Skr. *mā* Gr. *μὲ* (III § 434. 2 p. 365); in the 1<sup>st</sup> dual Skr. *-vas -va*, cp. Skr. *vdm* Goth. *vi-t* Lith. *vè-du* (III § 436. 1 p. 367, § 457 p. 396); in the 3<sup>rd</sup> sing. *-t -ti*, cp. Skr. *tā-m* Gr. *ρό-ν* (III § 409 p. 327).

It is not necessary that given forms shall originally have had the meaning which they actually convey in any language. Just as the Lat. *-mīnī* in *sequimīnī* even in proethnic Italic was anything but a personal ending (see II § 71 p. 165), so many others which now do duty for personal endings may have had very different meanings originally. There is the highest probability in favour of what has been said in § 956 p. 496 f. regarding certain imperative suffixes. And again, it is hardly

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inscription, Cambridge Philol. Society's Proceedings 1890, Dec. 4, pp. 16 ff. L. Ramshorn, *De verbis Latinorum deponentibus*, Leipz. 1830. J. G. Ek, *De verbis deponentibus Latinorum iidemque cum mediis Graecorum quodammodo comparandis*, Lund 1835. Nölting, *Das lat. Deponens*, Wismar 1859. A. W. Jahnsson, *De verbis Latinorum deponentibus*, Helsingf. 1872. H. Ebel, *Zur umbr. Conjugation*, Kuhn's Zeitschr. v 401 ff. M. Bréal, *La première personne du singulier en ombrien*, *Mém. Soc. Ling.* II 287 ff.

Keltic. Wh. Stokes, *Die Endung der 1. pers. sg. praes. indic. act. im Neurischen*, Kuhn-Schleicher's Beitr. II 131 ff. Thurneysen, *Der ir. Imperativ auf -the*, *Idg. Forsch.* I 460 ff. Wh. Stokes, *Zum kelt. Passivum*, Kuhn-Schleicher's Beitr. VII 467. Loth, *La 2<sup>e</sup> personne du singulier du présent de l'indicatif actif (gallois ydd, cornique yth, armoricain ez ou es)*, *Revue Celt.* X 348 f.

Germanic. R. Kögel, *Zum deutschen Verbum: Die Endung der ersten Person Pluralis und die Endung der zweiten Person Pluralis*, Paul-Braune's Beitr. VIII 126 ff. A. Ludwig, *Über die 2. sing. perf. ind. im German.*, *Sitzungsber. der böhm. Gesellsch. d. Wiss.* 1884 pp. 52 ff. J. von Fierlinger, *Die II. ps. sg. perf. starker Flexion im Westgerm.*, Kuhn's Zeitschr. XXVII 430 ff. *Idem*, Ahd. *-mēs*, *ibid.* XXVII 189 f. J. Thorckelsson, *Personalsuffixet -m i første Person Ental hos norske og islandske Oldtidsdigtere*, *Ark. för nord. fil.* VIII 34 ff. H. Ebel, *Das got. Passivum*, *ibid.* v 300 ff. W. Uppström, *Über das got. Medium*, *Germania* XIII 173 ff.

Slavonic. The Author, *Altbulg. beretiū und beratū*, Kuhn's Zeitschr. XXVII 418 ff. Miklosich, *Die Personalsuffixe des Dualis [in Old Slovenian]*, *Sitzungsber. d. Wien. Akad.* LXXXI 125 ff.

possible to deny a connexion between the endings *-nt -nti -nto* etc. of the 3<sup>rd</sup> plural and the participial suffix *-nt-* (II § 125 pp. 394 ff., and IV p. 50 footnote 1).

§ 972. The etymological connexion of Middle and Active ending is quite obscure. What, for instance, is the connexion between 3<sup>rd</sup> sing. mid. Gr. *-ται* and 3<sup>rd</sup> sing. act. *-τι*?

Remark. It is probable *a priori* that the Active endings as a class are the oldest. For these characterise an action simply, without the secondary meanings which the Middle Forms convey over and above those of the Active. On this principle we may regard the *\*-medhai* or *\*-medhāi* of the 1<sup>st</sup> plural as an extension of the act. *\*-me*. *\*-so* *\*-to* *\*-nto* are doubtless extensions of the active *\*-s* *\*-t* *\*-nt*, and if a particle *i* were added to these, the former would become *\*-sai* *\*-tai* *\*-ntai* or *\*-sai* *\*-tai* *\*-ntai*, the latter *\*-si* *\*-ti* *\*-nti*. But in the 2<sup>nd</sup> pl. the middle Skr. *-dhve* *-dhvam* are obviously to be kept quite apart from the active *-tha* *-ta*. And who is to prove that *\*-sai* *\*-tai* did not become *\*-si* *\*-ti* by loss of accent, and *\*-so* *\*-to* become *\*-s* *\*-t* in the same way? This explanation is actually suggested by Begemann, *Zur Bedeutung des schwachen Präteritums der german. Sprachen*, p. 188, and Osthoff, *Morph. Unt.* iv 282.

For the Passive Voice there were originally no special and characteristic endings in the Indo-Germanic languages. All so-called passive forms in the verb finite are either middle or active.

§ 973. Each person, both Active and Middle, had in the parent language at least two endings.

Sometimes there is no possibility of tracing any connexion between these different endings, as between *-ti* and *-e* in the 3<sup>rd</sup> sing. active (Skr. pres. *ás-ti* and perf. *ás-a*). In particular, there were a number of special endings in the Perfect Indicative, whose origin, it would appear, was quite distinct from that of the endings in the other tenses and moods.

But the rest are obviously variant forms of the same thing. This is true of *-mi* and *-m* in the 1<sup>st</sup> sing. active, of *-tai* or *-tāi* and *-to* in the 3<sup>rd</sup> sing. middle. The *-i* which distinguishes the active endings 1<sup>st</sup> sing. *-mi* 2<sup>nd</sup> sing. *-si* 3<sup>rd</sup> sing. *-ti* 3<sup>rd</sup> pl. *-nti* from *-m* *-s* *-t* *-nt* in the same persons, may, I suggest, be an affix particle (perhaps implying present time). The same *-i*, forming a diphthong with a preceding *-a*-vowel, is seen in the middle endings 1<sup>st</sup> sing. *-ai* or *-āi* (Skr. perf. *tutud-ē*) and

-*ōi* (Skr. conj. *ky-nāv-āi*), 2<sup>nd</sup> sing. -*saī* or -*ṣaī*, 3<sup>rd</sup> sing. -*taī* or -*tāī*, 1<sup>st</sup> pl. -*medhaī* or -*medhāī*, 3<sup>rd</sup> pl. -*ntaī* or -*ntāī* beside 1<sup>st</sup> sing. -*ə* (Skr. pret. *á-dviṣ-i*) and -*o* (Skr. opt. *dviṣīy-ā*), 2<sup>nd</sup> sing. -*so*, 3<sup>rd</sup> sing. -*to*, 1<sup>st</sup> pl. -*medhə* (Skr. -*mahi* Gr. -*μεθα*), 3<sup>rd</sup> pl. -*nto*. Other differences distinguish the endings of the 1<sup>st</sup> pl. act. Skr. -*mas* (-*masi*) and -*ma*, the endings of the 2<sup>nd</sup> and 3<sup>rd</sup> dual act. Skr. -*thas* -*tas* and -*tam* -*tām*, and so forth.

§ 974. Leaving aside the endings peculiar to the Indic. Perf. Act., the other personal endings are divided into Primary and Secondary; the 3<sup>rd</sup> sing. for instance has primary endings -*ti* active and -*taī* (-*tāī*) middle, and secondary -*t* active and -*to* middle.

The Primary endings belong to the Indic. Pres. Active and Middle (Skr. *dāda-ti dat-tē*), and include the *sio*-future (Skr. *dāsyā-ti -tē*), and the Indic. Perf. Middle (Skr. *dad-ē*). But forms with a secondary ending (Injunctive) could also serve as indic. present, see § 909 p. 457.

The Secondary endings belong to the augmented Indic. Active and Middle (Skr. *á-da-t á-di-ta, á-dada-t á-dat-ta* etc.), to the series which has such wide and varied use, the Injunctive Active and Middle (Skr. *dā-t di-tá* etc.), and to the Optative Active and Middle (Skr. *dadyā-t dadī-tá* etc.)

The Conjunctive varies, and takes both kinds.

Remark. Some light may be had from Irish syntax to explain why the Augment required secondary endings. The augment was an independent adverb (§ 477 pp. 24 f.); and we find in Irish double forms, one for Conjunct and one for Absolute use, e. g. 3<sup>rd</sup> sing. *do-beir* for \**bere-t* (secondary ending) and *berid* for \**bere-ti* (primary). Probably the Irish usage in some degree reflects that of proethnic times, and we should suppose that in the parent language, while *bhère-ti* would be used alone, such a form as \**pró bhère-t* would be used when the verb was coupled with a prefix. On this supposition, Skr. *prā bharati* is due to the analogy of independent *bhārati*, and vice versa Lat. *vēhis* to that of the compounds, as *dā-vehis*. But this kind of variation cannot be assumed for all tenses and moods in the parent language (of course the perfect indicative active is always excepted). It certainly was not found in the optative, which in the existing languages always shows secondary personal endings. And notwithstanding Skr. 2<sup>nd</sup> sing. imper. *vē-ṣi* and Gr. *λέξαι* (§ 910 Rem. p. 459 f.), we must not venture to allow it for imperative expressions.

§ 975. Amongst the suffixes of persons, *r* has a place to itself. It is found sometimes alone as a personal ending (as Skr. 3<sup>rd</sup> pl. *cakr-úr*), sometimes in conjunction with others (as Skr. 3<sup>rd</sup> pl. pres. *duh-r-atē* Lat. 3<sup>rd</sup> pl. *sequo-ntu-r*). As Italic and Keltic have it in almost all persons, and as the forms which contain it must be treated together, a special chapter will be given to it after the other endings have been discussed (§§ 1076 ff.).

### ACTIVE ENDINGS.

#### 1<sup>ST</sup> PERSON SINGULAR.

§ 976. Proethnic Indo-Germanic.

(1) *-mi*, Primary Ending for Unthematic Stems. \**és-mi* 'I am': Skr. *ásmi* Arm. *em* Gr. *εἰμι* Alban. *jam* (for \**em* \**esmi*, § 493 p. 52) Goth. *im* Lith. *esmi* O.C.Sl. *jesmĭ*. Skr. *dáda-mi* Gr. *δίδο-μι* 'I give'. Skr. *śy-ñā-mi* 'I break to pieces' Armen. *baṛ-na-m* 'I lift' Gr. *δάμ-νῃ-μι* 'I tame' O.Ir. *glenim* 'I remain hanging' (for \**gli-na-mi*) O.H.G. *gi-nō-m* 'I gape'. Most languages came indepently to use this ending with Thematic stems: Skr. *bhárāmi* Armen. *berem* O.Ir. *berim* 'fero' O.H.G. *wirdon* 'I become' Serv. *nesem* 'I bear'.

(2) *-ō*, the Primary Ending for Thematic Stems. \**bherō* 'fero': Avest. Gath. *ufyā* 'I weave, extol' Gr. *φείρω* Lat. *ferō* O.Ir. *as-biur* 'effero, dico' Goth. *batra* Lith. *vešū* 'veho'. Future Avest. Gath. *vax-šyā* 'I will speak' Lith. *dā'-siu* 'dabo'. Con-junctive \**es-ō* from indic. \**es-mi*: Avest. Gath. *aṇhā* Skr. *bráv-a* 'dicam' Gr. *ἔω ᾧ* Lat. (fut.) *erō*. *-ō* also in the Greek long-vowel Con-junctive, as *φείρω* (pl. *φείρω-μεν φέρον-τε*), and the Aryan *-ā* seems to be identical in the forms Skr. *árcā* (3<sup>rd</sup> sing. *árc-a-t*) Avest. Gath. *per'sā* (3<sup>rd</sup> sing. *per's-ā-itī*), see § 918 Rem. p. 466.

(3) *-m* (after sonants) and *-n* (after consonants) Secondary Ending for any Stem. \**bhéro-m*: Skr. *á-bhara-m* Gr. *ἔ-φερο-ν* Lat. *su-m* O.C.Sl. *nesū* 'bore'. Conj. Lat. *fera-m* O.Ir. *do-ber*



O.C.Sl. *bera* (§ 929 p. 474). Skr. *á-yā-m* 'I went' Gr. *ἔ-δρα-ν* 'I ran' Lat. *era-m* O.Ir. *ba* 'fui' Goth. *i-ddja* 'I went'. (Opt. *\*s-(i)ǵē-m* 'sim': Skr. *syā-m* Gr. *εἴη-ν* Lat. *sie-m si-m*. *\*ēs-ŋ* 'eram' (before sonants also *\*ēs-ŋm*): Skr. *ās-am* Gr. *ἦ-α*. *s*-Aorist Skr. *á-cāiṣ-am* Gr. *ἔ-τεῖσ-α* from *✓qeṣ-* 'pay a penalty, etc.'. Opt. *\*bheroǵ-ŋ*: Skr. *bhārēy-am*.

(4) *-a* in the indic. perf. *\*uoið-a* 'I know': Skr. *véd-a* (Ir. *oíð-a* O.Ir. *ro cecan* 'cecini' Goth. *vát*).

§ 977. Aryan. (1) *-mi*. Skr. *ás-mi* Avest. *ah-mi* O.Pers. *amīy*. Skr. *dádha-mi* 'I place' Avest. *dadā-mi*. Skr. *ky-ñó-mi* 'I make' Avest. *ker'-nao-mi*.

(2) The ending *-ā* = Idg. *-ō* is regular in the Gatha dialect of Avestic for the indic. present, as *spasyā* 'conspicio, I watch' (Bartholomae, Kuhn's Zeitschr. xxix 271 ff.). Independently both Sanskrit and later Avestic adopted the re-formation with *-mi* (§ 976. 1); as Skr. *bhārāmi dāsyāmi* late Avest. *barāmi* O.Pers. *dārayāmīy* (Skr. *dhārāyāmi*). The reason for this innovation was that there were often parallel forms, one thematic and the other unthematic, as Skr. *dá-dhā-ti* and *dá-dh-a-ti*, Avest. *da-dā-iti* and *da-p-a-iti*, and it was a recommendation for *-mi* with the thematic stem that by this the number of syllables became the same in all persons of the singular. Another thing which may have had some influence is that in the 1<sup>st</sup> sing. mid. indic. pres. of both classes the same ending (*-aṁ*) was used from the proethnic Aryan period.

(3) The short-vowel (or thematic) conjugation and the long-vowel both show the endings *-ā* and *-āni* side by side; the former was proethnic Idg. (§ 976. 2 p. 517): Skr. Ved. *bravā* Ved. and class. *brāvāni* (3<sup>rd</sup> sing. *brāv-a-t*) Avest. *mrava mravāni* (3<sup>rd</sup> sing. Gath. *mrav-a-iti*) beside indic. Skr. *brāv-ī-ti* 'speaks' 1<sup>st</sup> pl. *brū-mās*; Skr. Ved. *vōcā* (Gr. *(F)εἶπε*) Ved. and class. *vōcāni* (3<sup>rd</sup> sing. *vōc-a-ti*) beside indic. *á-vōc-a-t* (Gr. *ἔ-(F)εἶπε*) from *vac-* 'to speak', Avest. *per'sā* (3<sup>rd</sup> sing. *per's-a-iti*) beside indic. *per's-a-iti* 'asks', *azāni* beside indic. *az-a-iti* 'agit'.

The origin of *-ni* is obscure. Perhaps we should connect

it with the Ar. *-na* of Avest. 2<sup>nd</sup> sing. *bara-nā* and the ending of the 2<sup>nd</sup> pl. *-than-a -ta-na* (§ 600 p. 143, § 1010).<sup>1)</sup>

(4) *-m*. Skr. *á-bhara-m* Avest. *barem* O.Pers. *abaram*. Skr. *á-dadhā-m* Avest. *dadā-m*. Optative Skr. *dadh-yá-m* Avest. *daiđya-m*.

(5) *-m* appears in Aryan regularly as *-am*, which we may consider the ante-sonant form (*-mm*). See I § 231 Rem. p. 196. *-am* seems to have been helped in beating *\*-a* = Gr. *-a* out of the field by various causes: in Skr. *á-han-am* and other such by the existence of thematic and unthematic variants together (cp. *á-han-a-t* § 498 p. 58); in *ás-am ád-am* by a wish to distinguish these from the perfect (*ás-a ád-a*); in the optative *bhárēy-am*, by a wish to distinguish active and middle (*bharēy-a*). Skr. *á-brav-am* Avest. *mraom* i. e. *mrav-em* 'I spoke'; Skr. *ás-am* O.Pers. *ah-am* 'eram'. Avest. *diđaēm* i. e. *diđay-em* beside *di-đaē-iti* 'sees'. Skr. *á-kṣār-ṣ-am* (Gr. *ἄ-κῥαῖο-α*) from *kṣar-* 'to flow, pass away'. Optative Skr. *bhárēy-am* (not found in Iranian).

(6) *-a* in the Perfect. Skr. *véd-a* Avest. Gath. *vaēd-ā* 'I know': Gr. *oīda*. On Skr. *dadhāu* see § 852 p. 402 f.

§ 978. Armenian. Perfect *-a* not found.

(1) *-m* = Idg. *-mi*. *em* 'I am' for *\*es-mi* § 501 p. 63. *mna-m* 'I remain, wait for' *jana-m* 'I take pains' § 581 p. 122. *ba-na-m* 'I open' § 601 p. 144. *jer-nu-m* 'I warm myself' § 642 p. 180.

This *-m* spread to the Thematic stems (§ 976. 1), as *berem* 'fero'; *e* before the *-m* comes from the 2<sup>nd</sup> and 3<sup>rd</sup> singular (as in Serv. *nesem*, § 983), partly from the analogy of *em*. The same innovation is seen in the 3<sup>rd</sup> pl. *beren*, § 1019.

(2) The history of Idg. *-m* and *-m* is not clear. The ending *-m* is believed to occur in e. g. *etu* 'I gave' *edi* 'I placed' *beri* 'I bore'. Compare Bartholomae, Stud. Idg. Spr. II 36 f.; Bugge, Kuhn's Zeitschr. xxxii 75.

1) What Mahlow suggests and Wiedemann approves (Lang. Voc. 162, Lit. Prät. 160) does not convince me in the least.

## § 979. Greek.

(1) *-μι*. εἶμι 'I go': Skr. *é-mi*. ἄη-μι 'I blow': Skr. *vd-mi*. Lesb. *τίμα-μι* 'I honour': cp. Armen. *jana-m* O.H.G. *salbō-m*.

(2) *-ω*. ἄγω: Lat. *agō*. Conjunctive εἰδέω *-ō* 'sciam': Lat. *vidēdō*. Conj. φέρω 'feram': cp. Skr. Ved. *ārcā*. In Homer the Conjunctive is extended by *-μι*, a re-formation: *κτείνω-μι* with indic. ἔκτεινα, ἐθέλω-μι indic. ἐθέλω, cp. ἐθέλῃσθα § 987 and ἐθέλῃσι § 995.

(3) *-ν* for *-m*. ἡγο-ν: Skr. *dja-m*. ἐ-τίθη-ν: Skr. *dā-dadhā-m*. Optative θείη-ν τιθείη-ν: Skr. *dadh-yd-m*.

*-α* for *-η*. Aorist ἔχε(F)-α 'I poured', ἔδειξ-α 'I showed'. The opt. form \*φερο(κ)-α which Skr. *bhārēya-m* leads as to expect, is lacking. In its stead we find *φέροι-μι*, which is undoubtedly a re-formation (*-οιμι* : *-οις* like *τίθημι* : *τίθης*), and one or two cases in Attic of *φέροιν*, which stands to Skr. *bhārāya-m* as *ἔ-φῦ-ν* to *á-bhūv-am*.

(4) *-α* = Idg. *-a* in the Perfect. δέδορξ-α 'I have seen': Skr. *dadārś-a*.

§ 980. Italic. *-mi* and *-a* (Perfect) are not found.

(1) *-ō*. Lat. *agō*: Gr. ἄγω; Umbr. *sestu* 'sisto'. Lat. *plantō* for *-ā-(i)ō*, Umbr. *subocauu sobocau* 'adoro' (*-uu* and *-u* = *-ō*!). Conj. (fut.) Lat. *er-ō*: Avest. Gath. *aəh-ā*; cp. § 918 Rem. p. 466.

(2) *-m*. Lat. Osc. *s-u-m* § 528 p. 91; add Osc. *manafum*, if it means 'mandavi', see § 874 p. 423. Lat. *amā-bam*: O.Ir. *ba*. Conj. Lat. *ag-a-m*. Opt. Lat. *s-ie-m sim*. *-η* seems to be lost.

## § 981. Keltic.

(1) *-m* aus *-mi*. O.Ir. *cre-nim* 'I buy' Mod.Cymr. *pry-na-f* for \**na-mi* § 604 p. 145. *scaraim* 'I separate, separate myself' for \**scarā-mi*, *caram* 'I love' for \**carā-mi* § 584 p. 125.

1) As the Umbr. inf. *stiplo(m)* 'stipulari' etc. shows the group *āo* contracted in unaccented syllables (§ 1094. 7), it apparently follows that *subocau* is a new form instead of \**subocō* by analogy of *stahu* 'sto' and the like.

Forms like *lēcim* (beside *-lēciu*) and *berim* (beside *-biur*) are re-formed on the model of the verbs in *-mi* above mentioned. Compare § 976. 1.

Why is *-m* constantly doubled in Irish, thus shewing that the nasal was not spirant (*mh*) as in Cymric? This is no effect of the analogy of the Irish representative of Idg. *\*es-mi* 'I am' (with *mm* for *sm*); because *am* (never written *amm*) has no claim to be considered such (see § 506 p. 72). "Can it be true after all that Irish *-ām-* when following the accent became *-amm-?*" (Thurneysen.)

(2) Idg. *-ō*. *biu* 'I am': Lat. *fīō*. *no guidiu* 'I beg'. *-biur* 'I bear': Lat. *ferō*. *no charub* 'I will love': cp. Lat. *amā-bō*. See I § 90 p. 85.

(3) Idg. *-m*. *ba* 'fui' for *\*bhū-a-m*: Lat. *amā-bam* (§ 584 p. 125). Conj. *-ber* 'feram' for *\*bhera-m*; the absolute form *bera* is analogical, and no ground-form can be inferred for it.

Idg. *-ŋ* seems to be quite lost.

(4) Idg. *-a* in the Perfect. *ro sešlach* 'I struck down' for *\*se-slag-a*: cp. Goth. *slōh*.

### § 982. Germanic.

(1) Idg. *-mi* is common in West Germanic. Goth. *im* O.H.G. *b-im b-in* 'I am' for *\*es-mi* (§ 507 p. 73). O.H.G. *sestō-m* 'sisto, I arrange' (§ 545 p. 103), *salbō-m* 'I anoint' (§ 585 p. 126), *habē-m* 'I have' (§ 592 p. 133), *stā-m* 'I stand' (§ 708 p. 240), *ginō-m gei-nō-m* 'I gape' (§ 605 p. 146).

Goth. *salbō* doubtless has not the secondary Idg. *-m*, but gets its ending from *salbō-m -nd* by analogy of *batra*: *batra-m -nd*. On Goth. *haba* see § 708 p. 238 f.

(2) Idg. *-ō*. Goth. *batra* O.H.G. *biru* 'fero' O.Icel. *heito-mk* 'I call myself', Goth. *nasja* O.H.G. *neriu nerru* 'I save'; on forms like O.H.G. *hilfu* see I § 661. 2 p. 517. In High German dialects, especially Rhine Frankish, the *-n* of verbs in *-mi* has been spreading to the thematic class since the 11<sup>th</sup> century; e. g. *wirdon gihun* instead of *wirdo gihu*, and so too O.Low Fr. *wirthon* (cp. § 976. 1).

(3) Idg. *-m*. Goth. *i-dǫja* 'I went': Skr. *á-yām*; Goth. *nasida* O.H.G. *nerita* 'I rescued' Norse Run. *tawido* 'I made'. No trace is left of *\*-un* = *-m*; it must have been once used in the opt. Goth. *bairau*; the origin of this form (O.Icel. *bera*) is very uncertain, see § 928 p. 474.

(4) Idg. *-a* in the Perfect. Goth. *vát* O.H.G. *weiz* 'I know': Skr. *véd-a* Gr. *oid-a*.

§ 983. Balto-Slavonic. *-a* (Perfect) is wanting.

(1) *-mi*. Lith. *es-mi* O.C.Sl. *jes-mī* 'I am': on Lith. *es-mi* see § 510 p. 75. O.C.Sl. *ima-mī* 'I have' (§ 586 p. 127); reformation with *-mī*, *bi-mī* etc., see § 727 p. 257.

It is true the Lith. reflexive ending *-mē-si* (*dūmē-si*, *velmē-s* § 511 p. 76) contains the middle ending *-mē* = Gr. *-μαί* (cp. Pruss. *asmai*),<sup>1)</sup> and by I § 664.3 p. 523 it follows that *-mē* becomes *-mī*. Still it does not follow that *-mi* must always come from *-mē*; active and middle endings must have existed side by side, and only in the *si*-reflexive was *-mē* made regular on the strength of 1<sup>st</sup> sing. *-ā-s* : *-ū*, 1<sup>st</sup> pl. *-mē-s* : *-me*. Compare § 991 on *dūsi* : *dūsē-s*.

In Servian *-m(ī)* runs through all conjugations: first, beginning with the 13<sup>th</sup> century, *-a-m*, as *čuva-m* 'I protect' (cp. O.C.Sl. *ima-mī*); then *-i-m*, as *hvali-m* 'I praise' (cp. O.C.Sl. *bi-mī*); lastly *-e-m*, as *nese-m* 'I bear', which should be compared with Armen. *bere-m* (§ 978 p. 519), only *mogu* 'I can' and *hoću* 'I wish' kept fast to the old ending. The same is true of Slovenian.

(2) Idg. *-ō* only in Baltic; Lith. *sukū* 'I turn' *sukū-s(i)* 'I turn myself' (I § 664.3 p. 523), *dū'siu* 'dabo'. On the spread of *-u* to stems in orig. *-ā* and *ē*, as *lindau*, see § 586 p. 127, § 593 p. 133 f., § 991.1.

(3) Idg. *-m* only in Slavonic. O.C.Sl. *vezū* 'I transported' for *-o-m*: Skr. *vāha-m*, *da-ch-ū* 'I gave' (§ 833 p. 370). Con-

1) No help can be got from O.C.Sl. *-mi* instead of *-mī*, which some might be inclined to regard as another instance of middle ending. Miklosich cites it as a very rare variant (Vergl. Gr. III<sup>a</sup> 63).

junctive *veza* = Lat. *veha-m* as indic. pres., see § 929 p. 474.  
Idg. *-m* is quite gone.

## 2<sup>ND</sup> PERSON SINGULAR.

§ 984. Proethnic Indo-Germanic. On the imperative *-dhi*, and imperatives without any personal ending like Skr. *bhāra*, which we here disregard, see §§ 957 ff. pp. 497 ff.

(1) *-si*, Primary ending. *\*ei-si* 'is': Skr. *ē-ṣi* Gr. *ἐῖ* for *\*ēi-(σ)ι*. Skr. *bhāra-si* O.Ir. *beri* for *\*bere-(s)i* Goth. *bairi-s* 'fers'. Conj. Skr. *bhār-a-si*. O.Ir. *cari* 'amas' for *\*cara-(s)i*, Goth. *salbō-s* 'thou anointest'.

From *√es-* 'esse' two forms. 1. *\*esi*: Skr. *ási* Gr. *ἐῖ* for *\*ēi-(σ)ι* Alban. *jē* for *\*e(si)* (G. Meyer, M. Hertz zum 70. Geburtstag, 1888, pp. 86 f.). 2. *\*es-si*: Armen. *es* Gr. Hom. *ἐσ-οῖ*: On the relation of the two Idg. forms, see III § 356 Rem. p. 258. On Goth. *is* see § 990.1; on Lith. *esi* O.C.Sl. *jesi*, § 991.

(2) *-s*, Secondary ending. *\*e-stā-s* from *√stā-* 'stare': Skr. *á-sthā-s* Gr. *ἐ-στη-ς*; Skr. *á-yā-s* Goth. *i-ddjē-s* 'wentest'. *\*bhēre-s*: Skr. *á-bhara-s* Gr. *φῑρε-ς ἱ-φῑρε-ς* Lat. *ag-i-s* O.Ir. *do-bir* O.C.Sl. *veze*; Goth. *ōg-s* 'fear thou'. Opt. *\*bheroī-s*: Skr. *bhārē-ṣ* Gr. *φῑροι-ς* Goth. *bairái-s* Pruss. *imai-s* 'take thou' O.C.Sl. *beri*; *\*s-(i)jē-s*: Skr. *syā-s* Gr. *εῖη-ς* Lat. *siē-s* *st-s* Goth. *vitei-s* 'scias'.

(3) *-tha* in the ind. perf.: Skr. *vēt-tha* Gr. *οἶσθα* 'knowest', O.H.G. *gi-tars-t* 'darest'.

## § 985. Aryan.

(1) *-si*. Skr. *vák-ṣi* Avest. *vaṣi* beside 3<sup>rd</sup> sing. Skr. *váṣ-ti* Avest. *vaṣ-ti* 'desires'. Skr. *dádha-si* 'placeth', Avest. *daḍa-hi*. Skr. *bhāra-si* Avest. *bara-hi*. Conj. Skr. *bhāra-si*, Avest. *barā-hi* (also *barāi* with *h* dropt) O.Pers. *vainā-hy* 'videas'. Imperative Skr. *sát-si* 'place thyself, sit' see § 910 Rem. p. 459 f.

Skr. *ási* Avest. *ahi* Goth. *ahy* 'thou art', see § 984. 1.

(2) *-s*. Skr. *dhā-s á-dhā-s* Avest. *dā* from *√dhē-* 'to place', Skr. *ákar* for *\*a-kar-ṣ* 'madest', Avest. *var-š* 'didst work' ground-form *\*yerk-s*, *sqs* 'didst say' ground-form *\*kens-s* (§ 493

p. 52). Skr. *á-dadha-s* Avest. *daddā*. *s*-Aorist Skr. *ájaiṣ* for *\*á-jaiṣ-ṣ*, *íchān* for *\*a-chānt-s-s* see § 816 p. 354. Skr. *bhára-s á-bhara-s* Avest. *barō* O.Pers. *gaudaya* 'didst hide' (I § 558.4 p. 415). Conj. Skr. *ás-a-s* Avest. *aṇh-ō*, Skr. *bhár-a-s* Avest. *bar-ā*. Opt. Skr. *bhárē-ṣ* Avest. *barōi-ṣ*, Skr. *dadhyā-s* Avest. *daiṣyā*.

(3) *-tha* in the Perfect. Skr. *véttha* Avest. Gath. *vōista* (I § 475 p. 351), Skr. *dadhā-tha* Avest. Gath. *dada-ṣa*.

§ 986. Armenian. *es* 'art': Gr. *ἐσ-σι*. Hence *beres* 'fers', like *berem* following *em* (§ 978 p. 519).

Remark. The ending *-r* found in many tenses and moods Bugge thinks he can explain as *-s* + particle *\*ra* = Gr. *ῥα*, e. g. aor. *ar-ar-er* (pres. *ar-ne-m* 'I make') = Gr. *ῥε-αῖ-ε-ς ῥα* (Beitr. zur etym. Erläut. der arm. Spr., Christiania 1889 pp. 44 ff.). This particle he sees in the ending of the 3<sup>rd</sup> sing. imperf., as *berer alair toloir*. However, it is not found elsewhere in Armenian.

§ 987. Greek.

(1) *-si*. Only left in Hom. and Syrac. *ἐσ-σι* 'thou art', with a variant *εἶ* for *\*ἐ(σ)ι*, and in *εἶ* 'wilt go' for *\*ἐ(σ)ι*. When the secondary ending *-ς* was added to these forms on the analogy of *φη-ς* 'sayest' and the like, arose the Hom. and Herod. *εἶ-ς* or *εῖ-ς* 'thou art' and Hesiod's *εἶ-ς* 'thou wilt go'; in the same way was produced 2<sup>nd</sup> sing. *ἐλθεις-ς*, § 966 p. 507.

*φέρεις* 'fers' either for *\*φερε(σ)ι* = Skr. *bhára-si* with secondary *-ς* added (see the Author's Gr. Gr.<sup>2</sup> p. 145, and Fay in the Amer. Journ. Phil. xi 219 f.); or for Idg. *\*bherēi-s* (by I § 611 p. 461), a form like Skr. *áj-ai-ṣ* (see footnote to page 61). The latter view, on which *φέρεις* is really injunctive, is to my mind likelier, because it explains at the same time the 3<sup>rd</sup> sing. *φέρει* in the simplest way (§ 995). The conjunctive *φέρης* sprang up by the side of *φέρεις* because of the existence of *φέρητε* beside *φέρετε*.

(2) *-s*. *ἔ-βλη-ς*: Skr. *á-gla-s* (§ 587 p. 127). *ἰ-τίθη-ς*: Skr. *á-dadha-s*. *ἡγε-ς*: Skr. *ája-s*. Opt. *ῥέροι-ς* *εἶη-ς*. Observe the injunctive forms with indicative present use, Dor. Cypr. *φέρε-ς* Att. *φής-ς* *τίθη-ς* Lesb. *qίλη-ς* etc., § 909 p. 457.

(3) *-tha* in the Perfect. Only two original forms are left: — *ολθα*: Skr. *vēthā* 'knowest' and *ῆσ-θῦ* from *ἐσ-* 'to be'. The latter, which was afterwards used as imperfect (§ 858 p. 407), was the origin of many analogical forms, for instance *ἐφησθα ἤμισθα τίθησθα* conj. *ἐθέλησθα* opt. *βάλουσθα εἴησθα*. *ολθα-ς ῆσθα-ς* are of very doubtful authority before the Alexandrian age; *ολθα-ς* occurs in Herodas II 55. In the indic. perf. *-α-ς* was usual instead of *-θα*, e. g. *τέροφ-α-ς*, also *ολδας* beside *ολθα*; this ending came from the aorist, and was recommended by the ease with which it could be added to consonant stems (§ 844 p. 386).

§ 988. Italic.

(1) *-si* cannot be traced. But since in the 3<sup>rd</sup> sing. *\*-tī* seems very early to have become *-t* (§ 996), nothing prevents our deriving Lat. *es* 'art' and *ēs* 'eatest' from *\*essi* and *\*ētsi*.

(2) *-s*. Lat. *vī-s* (§ 505 p. 69), *vel* for *\*vel-s* (loc. cit.); but in *fer-s* the *-s* is due to analogy. *nā-s nē-s plantā-s vidē-s, amā-bās. agi-s farcī-s*, Umbr. heris heri heri 'vis, vel' (p. 68 footnote, and § 715 p. 248). Conjunctive Lat. *er-i-s vider-i-s, ag-a-s ag-ē-s*. Optative Lat. *siē-s sī-s*, Umbr. *sir 'si sei 'sis*.

(3) Idg. *-tha* in the Perfect. Lat. *vīdis-ti* (inscr. also *-tei*) got its *-ī* either from the 1<sup>st</sup> sing. with the middle suffix *-ī*; or else the middle ending existed in Italic in the 2<sup>nd</sup> person too (*\*-sī* for pr. Lat. *\*-saī*) and *-tī* got its *-ī* from this, in the same way as *-ši* in O.C.Sl. *berēši* is a mixture of active Idg. *\*-si* and middle Idg. *\*-saī* or *\*-sai* (§ 991).

§ 989. Keltic. *-tha* (Perfect) is lost. The ending of *cechan* 'cecini' is obscure.

(1) *-si*. O.Ir. *beri* 'fers' for *\*bere-si* (I § 576 p. 431).

(2) *-s*. Injunct. *comēir* 'get up' for *\*cóm-ecs-rec-s-s* (§ 826 p. 363) *-bir* 'fers' for *\*bere-s* (I § 576 p. 431, § 657.5 p. 508).

In the *a*-conjunctive, *berae bere* and *do-berae -e* for a supposed *\*berāsi*; remember that even in the indicative the primary *-i* kept on intruding more and more into the conjunct flexion: only a few verbs, as *-bir*, kept clear of it.



## § 990. Germanic.

(1) *-si*. O.Icel. *ber-r* = pr. Germ. *\*biri-zi*, O.H.G. *biris* = pr. Germ. *\*biri-si*; similarly O.Icel. *tem-r* 'tamest' *kalla-r* 'callest' pr. Germ. *\*-zi*, O.H.G. *zemi-s salbō-s* pr. Germ. *\*-si*. Whether Goth. *batri-s gatamji-s salbō-s* have *\*-zi* or *\*-si* cannot be made out, as both pr. Goth. *-z(i)* and *-s(i)* must needs become *-s* (I § 660.5 p. 516). The breathed *-s* in West Germanic is thus explained: — in O.H.G. *tuos gā-s*, in O.H.G. and A.S. *bis* (ground-form *\*bhγ-i-si*, with *i* dropt on the analogy of forms like *tuos biris*, cp. I § 661 pp. 516 ff.), and in the present of Class II *B* (§ 532 p. 93), the vowel before *s* had the word-accent. Still the breathed *s* would probably not have become general even so, but that the pronoun *\*þā* 'thou' so often adhered to the verb form, as in O.H.G. *biristu*, see I § 661 Rem. p. 519. Compare pr. Germ. *-þi* and *-ði* in the 3<sup>rd</sup> singular, § 998.

Whether Goth. *is* 'thou art' be Idg. *\*esi* or *\*essi* is not clear (§ 984. 1).

(2) *-s*: Goth. pr. Norse *-z*, pr. W.Germ. *-z* and *-s*. Goth. *gatamidēs* O.Icel. *tamðer* O.H.G. *zemitōs* A.S. *temedes*. O.H.G. *zigi* pret. 'thou didst accuse': Skr. *á-diś-a-s* § 893 p. 441, *nī curi* 'noli' § 909 p. 458. Goth. conj. *ōg-s* (fear thou) § 917 p. 465. Opt. Goth. *bairái-s* O.H.G. *berē-s* A.S. *bere*; O.H.G. *sī-s* 'mightst be', Goth. *bitei-s* O.H.G. *bizzi-s* A.-S. *bite* 'mightst bite', see § 893 p. 441. The constant use of affixt *\*þā* 'thou' partly caused the secondary ending to be kept in West Germanic.

The O.H.G. compounds *biris-tu tuos-tu* (see under 1.) *zemitōs-tu sīs-tu bizzi-s-tu* were misunderstood, and in the 9<sup>th</sup> century people began to regard them as *birist + du* (*thu*) and so forth. This was due to *kanst* beside *kanstu*. Some part of this mistake is due to *bist*, which got its *t* earlier from the preterite-presents. In the same way we explain A.S. *birest* beside *bires*, and the like.

(3) Idg. *-tha* in the Perfect. Goth. *las-t* 'thou didst pick' (pres. *lisa*) *slōh-t* 'didst strike' (pres. *slaha*) O.H.G. *gi-tarst*

'darest' (1<sup>st</sup> sing. *gi-tar*). By their analogy Goth. *váist* O.H.G. *weist* 'knowest' (1<sup>st</sup> sing. *váit weiz*), Goth. *qast* 'didst say' (pres. *qīpa*) with *st* instead of regular *ss*. Further, Goth. *bar-t* 'didst bear' *skal-t* A.S. *scealt* 'shalt' instead of *\*bar-p* etc. See I § 553 p. 406. The sole example of pr. Germ. *-pa* = *-tha* is A.S. pres. *ear-ā ar-ā* 'art', which must therefore be a transformat of pres. mid. *\*ar-pēs* = Skr. *ir-thās* (§ 509 p. 75).

In West-Germanic and Norse *-t* spread from the preterite present to the Present: O.H.G. *bis-t* O.Icel. *es-t* 'thou art', *wil-t* 'wilt, wishest'.

In West-Germanic, the Perfect as an historic tense exchanged the form with *-tha* for that of the thematic aorist, as O.H.G. *zigi* = Skr. *ā-diś-a-s*, whence followed intermixture with the optative perfect; see § 893 pp. 441 f.

§ 991. Balto-Slavonic. *-tha* (Perfect) is wanting.

(1) Idg. *-si*. Lith. *ei-si* 'goest', *dūsi* 'gives' for *\*dū-t-si*. Whether Lith. *esi* is to be compared with Skr. *ási* or Gr. *ἐσ-σι* (§ 984 p. 523) is still uncertain.

Starting from *esi*, *-i* spread to the other verbs. *dū'di* instead of *dūsi* beside *dū'(d)-mi dū'd-u*, *degi* beside *degmi degù*, *sukti* beside *sukù*, *verti* for *\*verti* beside *verczü*, fut. *dū'si* for *\*dūsi* beside *dū'-siu*. Further, *\*lindō-i*, which became *lindai*, beside 3<sup>rd</sup> sing. *lindo* which drew after it the 1<sup>st</sup> sing. *lindau* = *\*lindō-u*; this adoption of *i* and *u* by *a*-stems took place first in the present, whence it passed to the preterite *a*-stems because both had the same ending in the 3<sup>rd</sup> sing. and in the plural and dual (e. g. *būvo* 'he was' like *lindo*); from the *a*-preterite, *-i* and *-u* then proceeded to the preterite with *ē*. See § 586 p. 127, § 593 p. 133, § 983. 2 p. 522. Another thing may have aided the change of *dūsi* to *dū'di*; — *dūsi* was also the 2<sup>nd</sup> sing. future,<sup>1)</sup> and thus also the present *\*lindō-si* (cp. O.C.Sl. *ima-ši*) may have been exchanged for *\*lindō-i*, because the former agreed with the 2<sup>nd</sup> sing. future.

1) *elsi* 'is' and *elsi* 'ibis' are distinguished by accent.

The Reflexive in Lithuanian has always the middle endings *-sẽ -ẽ*, as *desẽ-s* (1<sup>st</sup> sing. *dẽ(d)-mi* § 546 pp. 103 f.), *sukẽ-s vertẽ-s* (for *\*vertĩẽ-s*, cp. *te-vertẽ* § 954 p. 494); similarly the old books have *essie-gu* i. e. *esẽ-gu* (*-gu* is a particle). In the same way we have Pruss. *assai assei essei* 'thou art' *seggẽ-sai* 'thou doest'. Still, although *-ẽ* had to become *-i* anyhow by rule, we must not assume that all instances of *-i* in the 2<sup>nd</sup> singular come from *-ẽ*. The truth is no doubt that both active and middle endings were in use together, and it was only in the *si*-reflexive, as we saw was the case with the 1<sup>st</sup> sing. *-mi*, that the middle ending became the rule; cp. § 983.1 p. 522.

Proethnic Slavonic had *-ši* = Idg. *-si*, e. g. in *\*bere-ši* 'fers': Little Russian, Mod.Sloven., Serv., and Czech *berěš*. Along with this it had the middle *-sĩ* = Idg. *-sai* *-sai* in verbs with *-mi*: O.C.Sl. *jesi* 'art' *jasi* 'eatest' *dasi* 'givest', Little-Russ. *jesy jisy dasy* Mod.Slov. *si* 'art', Serv. *jesi* 'art', Czech *jsi* 'art'. By contamination of *-ši* and *-sĩ*, O.C.Sl. *bere-ši ima-ši* etc.

(2) Idg. *-s* can no longer be traced in Lithuanian, but in Old Prussian it can, — opt. *imai-s* 'take thou'. O.C.Sl. aor. *veze*: Skr. *váha-s*, opt. *vezi*: Skr. *váhẽ-ṣ*. As regards *da* 'gavest' for *\*dō-s-s* see p. 830 p. 367, where also the origin of the 2<sup>nd</sup> sing. *dastũ* instead of *da* is treated.

### 3<sup>RD</sup> PERSON SINGULAR.

#### § 992. Proethnic Indo-Germanic.

(1) *-ti* Primary ending. *\*es-ti* 'est': Skr. *ás-ti* Gr. *ἔσ-τι* Lat. *es-t* O.Ir. *is* Goth. *is-t* Lith. *ẽs-ti* *ẽs-t* O.C.Sl. (Russ.) *jes-tĩ*. Skr. *dáda-ti* Gr. Dor. *δίδω-τι* Lith. *dũ's-t(i)* O.C.Sl. (Russ.) *das-tĩ* 'dat'. Skr. *vá-ti* Gr. *ἄη-σι* 'blows' Lat. *ne-t planta-t* O.Ir. *carid* 'loves' Goth. *salbō-p* 'anoints' O.C.Sl. (Russ.) *ima-tĩ* 'hat'. Skr. *śy-nd-ti* 'breaks to pieces', Armen. *bař-na-y* 'lifts', Gr. *δαίμ-νῃ-σι* 'tames', O.Ir. *lenid* 'catches hold' (for *\*li-na-ti*) O.H.G. *gi-no-t* 'gapes'. *\*bhere-ti* 'fert': Skr. *bhára-ti* Armen. *berē* Lat. *agi-t* O.Ir. *beri-d* Goth. *batri-p* O.C.Sl. (Russ.) *bere-tĩ*. Conj. Skr. *ás-a-ti* 'sit' Lat. (fut.) *er-i-t*.

(2) *-t* Secondary ending. \**ēs-t* 'erat': Skr. *ās* Gr. Dor. ἤς; \**e-gem-t* 'he went': Skr. *á-gan* Arm. *e-kn*; \**e-dhē-t* 'he placed': Skr. *á-dhā-t* Armen. *e-d*. Skr. *á-dadhā-t* Gr. ἐ-τίθη 'he placed'. Skr. *á-ya-t* Goth. *i-ddja* 'he went'. *s-Aor.* Skr. *á-jāi-š* 'he conquered' for \**-š-ť*, O.Ir. *for-tē* 'he must help' for \**steigh+s+t*, O.C.Sl. *da* 'gave' for \**dō-s-t*. \**bhēre-t*: Skr. *bhāra-t á-bhara-t*, Gr. φέρε ἔ-φερε, Osc. *kúmbened* 'convēnit', O.Ir. pres. *-beir* O.C.Sl. *veze* 'vexit'. Conj. of *s-Aor.* Skr. *jé-š-a-t* O.Ir. *tēs tēs*; long-vowel Conj. Skr. *bhār-ā-t*, Arcad.-Cypr. φέρε-η, Osc. *deiva-i-d* 'iuret' heriia-d 'velit', O.Ir. *do-bera*. Opt. Skr. *s-yā-t* Gr. σῆ O.Lat. *sied* O.H.G. *sī wizzi*; Skr. *bhārē-t* Gr. φέροι Goth. *bairái* Lith. *te-sukē* 'turn' O.C.Sl. *beri*.

A combination of *-t* with the particle *u* produced the personal ending *-tu*. Skr. *ās-tu* 'esto' O.C.Sl. (Bulg.) *jestū* 'est', Skr. *bhāra-tu* 'ferto' O.C.Sl. (Bulg.) *beretū* 'fert' (§ 909 p. 458). Cp. *-ntu* in the 3<sup>rd</sup> pl., § 1017.

(3) *-e* in the Perfect. Skr. *vēd-a* Gr. οἶδ-ε Goth. *váit* 'he knows'. Skr. *ja-ghān-a* 'he struck, killed' O.C.Sl. *ro ge-guin* 'vulneravit, trucidavit'.

### § 993. Aryan.

(1) *-ti*. Skr. *ás-ti* Avest. *asti* O.Pers. *astiy*. Skr. *dádha-ti* Avest. *daḍa-iti*. Skr. *bhāra-ti* Avest. *bara-iti*, O.Pers. *tarsa-tiy* 'he fears'.

(2) *-t*. Skr. *á-dha-t* Avest. *dā-ḥ* O.Pers. *a-da*. Skr. *ās* Avest. *ās* 'erat' pr. Ar. \**ās-t*. Skr. *á-kar* Avest. *cor'-ḥ* 'made', Avest. *cōiš-t* 'announced' from *ciš-*. Skr. *á-tyñat* = \**a-tyñat-t* beside pres. *tyñat-ti* from *tard-* 'to pierce', Avest. *cinas* beside pres. *cinas-ti* 'teaches' (§ 626 p. 162). *s-Aor.* Skr. *á-jāi-š* 'he conquered' = \**a-jāi-š-ť*, *ábhar* 'he brought' = \**a-bhār-š-ť*. Skr. *á-bhara-t* Avest. *bara-ḥ* O.Pers. *abara*. Opt. Skr. *han-yā-t* Avest. *janyāḥ* O.Pers. *janiyā*, Skr. *bhārē-t* Avest. *barōi-ḥ*.

For the laws which apply where a word ends in two or more consonants, see I §§ 647 ff. pp. 491 ff. When combined with *-u* (§§ 992. 2) the *-t* is always kept, cp. Skr. *ás-t-u*

Avest. *as-t-u* with Skr. *ās* Avest. *as*, Skr. *gán-tu* Avest. Gath. *jan-tū* with Skr. *á-gan*, Skr. *prṇák-tu* with *á-prṇak*, iṣ-Aor. *aviṣ-tu* (§ 839 p. 376).

(3) *-a* = Idg. *-e* in the Perfect. Skr. *ās-a* Avest. *ānh-a* from *✓es-* 'to be'. On Skr. *pa-prā pa-prāu* Avest. *da-đa* see § 852 p. 402 f.

§ 994. Armenian. *-e* (Perfect) is wanting.

(1) The *t* of *-ti* becomes *i* after vowels (Hübschmann, Arm. St. I 74, above I § 360 p. 276).<sup>1)</sup> *berē* 'fert' for *\*bere-i* *\*bere-ti*, *bařna-y* 'lifts' for *\*bařna-ti*, *alay* 'grinds' for *\*ala-ti*, *xausi* 'loquiter' for *\*xausi-i -ti*.

(2) *e-d* 'he placed': Skr. *á-dha-t*. *e-kn* 'he came': Skr. *á-gan*, Idg. *\*e-gem-t*.

The *-r* of the 3<sup>rd</sup> sing. imperf., as *berēr*, is obscure; see § 986 Rem. p. 524.

§ 995. Greek.

(1) *-ti*. *ἔσ-τι, ἄρ-σι*, Dor. *δίδω-τι* Att. *δίδω-σι*.

(2) *-t* dropt off (I § 652.5 p. 498). Dor. Arcad.-Cypr. *ῆς* 'erat'. *ἔ-τιθῆ*. Injunctive *τιθῆ* serves as indic. present in Lesbian, cp. 2<sup>nd</sup> sing. Att. *τιθῆ-ς*. *ἔ-φερε*. Optative *ἔῃ*, *φέροι*. Conjunctive Arcad.-Cypr. and other dialects *φέρῃ*, like Skr. *bhára-t*.

The explanation of *φέρει*, which cannot be derived from *\*q<sub>1</sub>re-τι*, depends on that of the 2<sup>nd</sup> sing. *φέρεις*. If *φέρεις* = *\*q<sub>1</sub>re(σ)<sub>1</sub>+ς*, *φέρει* has been coined as complementary on the model of *φέροι* : *φέρεις*, *ἔφερε* : *ἔφερεις*. But if *φέρεις* is a form like Skr. *ájāi-ṣ*, which I have preferred as more probable, *φέρει* must go parallel to Skr. *á-śarāi-t* 'he broke to bits'; then *\*bherēḡ-t* was the ground-form. In any case it follows that *φέρει* had the secondary ending. Conj. *φέρῃ* is an ad-formate of *φέρει*, as *φίρῃς* of *φέρεις*. Compare § 987.1 p. 524. In Epic dialect *-σι* spreads from the unthematic indicative to the

1) Not so Bartholomae (Stud. Idg. Spr. II 27 f.), who holds that *t* just simply disappears between vowels.

last named conjunctive form, e. g. *ἐθέλῃσι* instead of *ἐθέλῃ*, cp. *ἐθέλω-μι* § 979. 2 p. 520, *ἐθέλῃσθα* § 987. 3 p. 525.

(3) *-e* in the Perfect. *οἶδ-ε*, *γέ-γον-ε*.

§ 996. Italic. *e* (Perfect) is wanting.

The endings *-ti* and *-t* are nowhere left unchanged. It is assumed that in all Italic dialects they became *-t* and *-d*: these remain in Oscan; in Umbrian *-t* remains (but the spelling varies, and we sometimes find *-t* and sometimes nothing, just as happens with other final consonants), while *-d* is dropt; in Latin, *-t* became the only ending, although instances of *-d* are found in old inscriptions. But an explanation has yet to be found why the *-i* of *-ti* (as of *-nti* in the 3<sup>rd</sup> plural) has disappeared without leaving a single trace. Compare I § 655. 7 p. 504.

(1) *-t* representing Idg. *-ti*. Lat. *es-t* Umbr. *est* Osc. *est* 1st. Lat. *agi-t ama-t*. Umbr. *tišit* 'deceit' *trebei-t* 'versatur' habe *habe* 'habet'; Osc. *faama-t* 'habitat' *stai-t* 'stat', Marruc. *fere-t* 'iēret', Vestin. *dide-t* 'dat'.

(2) *-d* representing Idg. *-t*. Thematic Preterite (§ 867 p. 414 f.): Lat. inscr. *vhevhave-d* 'fecit' *fece-d*; Umbr. *řeře* Osc. *dede-d* 'dedit' Osc. *kúm-bene-d* 'convēnit' *aamanaffe-d* 'mandavit' (§ 874 p. 422). Optat.: Lat. inscr. *sie-d*; Umbr. *si si -sei* 'sit', Osc. *da-di-d* 'dedat' Marruc. *-si* 'sit'. Long-vowel Conj. (cp. Skr. *bhára-t*, O.Ir. *-air-ema* § 997. 2): Umbr. *fašia* 'faciat' *kuraia* 'curet' Osc. *heriia-d* 'velit', Umbr. *heriiei* 'velit' Osc. *deivai-d* 'iuret' Osc. *fusi-d* 'foret'; Osc. *tadait* like Skr. *bhára-ti*, and Lat. *mitat* in the Duenos inscr., beside *sied feced* (unless we should read with Conway, Amer. Journ. Phil. x 452, *mita(n)t*).

In Latin *-t* early becomes the sole ending, *fui-t amā-bat sie-t si-t*, like *-nt* in the 3<sup>rd</sup> pl. Something may be ascribed to sentence-position, which would sometimes cause a change of *-d* to *-t* (e. g. *fui-t tum* for *fuid tum*).

§ 997. Keltic.

(1) Idg. *-ti*, whose vowel disappeared by I § 657. 1

p. 506 f. O.Ir. *is* 'is' for \**es-ti* (I § 516 p. 377). *berid* 'fert' for \**bere-ti*. *caraid* 'amat' O.Bret. *crihot* 'vibrat' for *-ā-ti*.

(2) Idg. *-t* dropt (I § 657.9 p. 509). *co-tī* 'donec veniat' for \**-t(o)-incs-t* (§ 826 p. 364). *no beir* 'fert' for \**bere-t*, *no chara* 'loves' for \**carā-t*, *hin-glen* for \**-gli-na-t* (cp. absol. *glenaid* 'remains hanging' for \**gli-na-ti*). Conj. *tēs tēs* 'eat' for \**steiks-e-t*, *-air-ema* 'suscipiat' for \**-emā-t*, *ro-chara* 'amet' for \**carā-t*.

(3) Idg. *-e*: *ro cechuin* 'cecinit' for \**ce-can-e* (I § 657.1 p. 505 f.

### § 998. Germanic.

(1) *-ti*. Goth. O.H.G. *is-t*. After sonants, liquids and nasals pr. Germ. *-þi* or *-đi* according to the position of the word accent (I § 530 p. 386). Gothic has only *-þ*, which may represent both *-þ(i)* and *-đ(i)* (I § 660.5 p. 516), e. g. *trudiþ* 'steps' Class II *B* like Skr. *tudā-ti*, *batriþ* 'fert' = Skr. *bhāratī*. West Germanic has both forms, O.H.G. using *-t* = pr. Germ. *-đi* always, whilst A.S. has usually *-đ* = pr. Germ. *-þi*; O.H.G. *biri-t hevi-t* and the like (§ 720 p. 251) are regular and *tuo-t* analogical, A.S. *dāđ đize-đ* (loc. cit.) regular and *bire-đ* analogical.

(2) *-t* dropt in all Germanic dialects (I § 659.6 p. 513). Goth. *i-ddja* 'he went': Skr. *á-ya-t*. Goth. *nasida* O.H.G. *nerita* 'he preserved'. Optative Goth. *batrái* O.H.G. *bere* pr. Germ. \**bérai-đ*; Goth. *vaurþi* O.H.G. *wurti* 'he would become' pr. Germ. \**urđi-þ*.

(3) *-e*, pr. Germ. *-i* in the Perfect. Goth. *skat-skáiþ* O.H.G. *sciad* 'he separated': Skr. *ci-chēda*. In Gothic *-i* disappeared by universal rule. O.H.G. *was nam* and the like follow the lead of *bant* etc. (I § 661.2 p. 517). That the lost vowel had *i*-quality is still indicated, according to W. van Helten (P.-B. Beitr. xiv 282 f.), in the *ē* of words like O.Fris. *wēt* 'he knows' = Goth. *vāit*, which is due to mutation.

### § 999. Balto-Slavonic. *-e* (Perfect) is wanting.

(1) *-ti* in Baltic occurs only with a few unthematic stems;

in Old Russian both with these and with the thematic. Lith. *ēs-ti ēst* Pruss. *ast* (*astits* = *asti tas* 'est hic') O.C.Sl. (Russ.) *jes-tŭ* 'is'. Lith. *eĩ-ti eĩt* Lett. *i-t* 'goes' Pruss. *zit*. Lith. *dũ'sti* reflex. *dũ'sti-s* O.C.Sl. (Russ.) *dastŭ* 'dat'. O.C.Sl. (Russ.) *bere-tŭ*: Skr. *bhāra-ti*.

(2) *-t* dropt in both branches (I § 663.3 p. 521). O.C.Sl. aor. *veze*: Skr. *vāha-t*, *s*-aorist *-ē* 'ate' for *\*ēts-t* (1<sup>st</sup> sing. *-ēsŭ*). Lith. injunctive used for indic. pres. and preterite: *sāko* 'says' *būvo* 'was', *tūri* has'. Optative Lith. *te-vežē* O.C.Sl. *vezi*: Skr. *vāhē-t*. Another example is Lith. *vėža* 'vehit' for *\*veža-t*. The *a* of this form, and of the 2<sup>nd</sup> pl. *vėža-te* and the 2<sup>nd</sup> dual *vėža-ta*, came in from the 1<sup>st</sup> pl. *vėža-me* and displaced *e*; this levelling was helped by present stems which had *i* all through, and those which had *o* in the plural, dual, and 3<sup>rd</sup> singular (*tūri-me* etc., *sāko-me* etc.); cp. O.H.G. Alemann. 2<sup>nd</sup> pl. *bera-t*, § 1015.

In Baltic the 3<sup>rd</sup> singular of all verbs served also for 3<sup>rd</sup> plural and 3<sup>rd</sup> dual. According to J. Schmidt (Kuhn's Zeitschr. xxv 595), the form *yrà* 'est' (from the *✓* of Skr. *īr-tē*, § 497 p. 57) was originally a substantive used predicatively ('existentia'), which did for all numbers; when this idiom became familiar, the 3<sup>rd</sup> singular of real verbs got to be used for all numbers alike. To my mind it seems likelier that the idiom is derived from that idiom of proethnic speech which allowed a neuter plural or dual subject to have a verb in the singular (cp. Homer's *δοῦρα σείσηνε* and *ᾠσσέ δειδήει*): this rule held in proethnic Baltic, and led by and by to using of the masculine or feminine plural in the same way.

In Lithuanian and Prussian, another ending besides these is found, namely *-ai*. Present Lith. *pa-vystai* 'withers' = *pa-výst(a)* and conjunctive (see § 909.3a p. 457) *te-lystai* 'let him grow haggard' = *te-lýst(a)*, Pruss. *swintinai* 'he sanctifies' = *swintina* (also *-ei -e* instead of *-ai*) *turrei* 'has' = *turri*. *s*-Future Lith. *su-gausai* 'he will or must get' = *su-gaũs*, *turėsai* 'he will or must have', in Prussian always used as conjunctive, as *boūsai* 'be he' *dāsai* 'let him give' (also *-ei* or



-e instead of -ai). All these forms with -ai can be used for the plural. I regard -ai as something originally independent which has attached itself to the verb, the same which appears in the nom. sing. *tasai* as compared with *tās* (III § 414 p. 336). Perhaps, however, it was not -ai but -sai (see *loc. cit.*).<sup>1)</sup> In this case we must assume that it was first added to the future, which seems to have ended with -s = -s-t in proethnic Baltic (injunctive of the s-aorist), cp. § 828 p. 365 f.; and after the double s was thinned (\**būs-sai* becoming \**būsai*), -ai was mentally abstracted and then added to the present.

In Old Bulgarian we find instead of -tī the ending -tū i. e. -t + particle *u* (§ 909 p. 457), e. g. O.Bulg. *jestū beretū*, cp. 3<sup>rd</sup> pl. *sātū beratū*. Perhaps proethnic Slavonic had *jestī* and *beret(ū)* corresponding to Lith. *ēsti* and *vēža*, and levelling took different directions in the dialects.

In Old Bulgarian -tū spread from the present to the aorist, and thus we have *pri-jetū* instead of -jē; these aorist forms then came to be used for the 2<sup>nd</sup> singular. See § 830 p. 367.

#### 1<sup>ST</sup> PERSON PLURAL.

§ 1000. Proethnic Indo-Germanic. The different languages show a vast number of endings, the original distribution of which can only be partly made out. Judging from Sanskrit, with its primary -masi -mas, and secondary and perfect -ma; from Old Irish, with -mi -me in absolute flexion, -m in conjunct; and from Old High German, whose -mēs properly belonged to the indic. present (with -m in indic. preterite and the optative), we should regard the forms with a characteristic s as being the primary of proethnic speech. Whether the vocalic suffixes and those ending in a nasal

1) This -sai may be identified with the Goth. *sái* O.H.G. *sē*, which Osthoff connects with Skr. *séd* = *sá id* 'that same' (P.-B. Beitr. viii 311).

(such as Lith. *-me* and Gr. *-μεν*) represent Idg. secondary and perfect suffixes respectively, is not clear.

(1) Primary Forms.

(a) *-mēs -mos*. Perhaps originally *-mēs* e. g. *\*i-mēs* 'imus', but *-mos* e. g. *\*bhéro-mos* 'ferimus', cp. III § 228 p. 111 f. on the endings of the gen.-abl. sing. *-es* and *-os*. Skr. *i-más bhára-mas*, Gr. Dor. *ἰ-μες φέρο-μες*, Lat. *i-mus feri-mus*, O.H.G. *tuo-mēs bera-mēs*. Perhaps we should add O.Ir. *do-bera-m* (for *\*-mos*), Czech *js-me nese-me* (for *\*-mes*) Serv. *jes-mo plete-mo* (for *\*-mos*).

(b) *-mesi -mosi*, possibly for *-mes -mos* extended on the analogy of the other primary endings in *-i*. Skr. Ved. *s-mási bhára-masi*. O.Ir. *ammi* 'sumus' for *\*esmesi* or *\*s-es-mesi*, *berme* for *\*beromi* *\*beromesi*; but phonetic law would permit us to assume for this language *\*-mēsi* (cp. above O.H.G. *-mēs*).

(2) Secondary or Perfect forms.

(a) *-mē -mō*. Skr. *á-bharā-ma bhārē-ma* perf. *vid-má*; Ved. also *-mā*. Osc. *manafu-m* comes in too, if it is 1<sup>st</sup> pl. ('mandavimus'), see § 874 p. 422. Goth. *vitum* O.H.G. *wizzum*, opt. Goth. *batrái-ma vitei-ma* (for *\*-mē* or *\*-mō*). Lith. reflex. *sùko-mė-s*, with variant *sùko-me*. Perhaps also O.Ir. *do-bera-m* (for *\*-mo*), Czech *js-me nese-me* Serv. *jes-mo plete-mo*.

(b) *-mem -mom* or *-men -mon*.<sup>1)</sup> Gr. *ἰ-φέρο-μεν φέρο-μεν ἰδ-μεν*, O.C.Sl. aor. *neso-mŭ*. Perhaps also O.Ir. *do-bera-m* (for *\*-mom* *\*-mon*); but there is no trace of a final nasal. O.C.Sl. *neso-my* may be derived from *-mōm -mōn*.

§ 1001. It is a difficult question how far the *-m-* of our ending, and likewise that of the middle ending Skr. *-mahē* Gr. *-μῆα*, had a sonant pronunciation (*-ḡm-*) in the parent language.

1) *-mem -mom* appear to deserve the preference to judge from Skr. *-tam* beside Lith. *-ta* O.C.Sl. *-ta* in the 2<sup>nd</sup> dual (§ 1031), and Skr. *-ām* beside O.C.Sl. *-e -ta* in the 3<sup>rd</sup> dual (§§ 1038 and 1040).

The following are cited from Avestic by Bartholomae (Kuhn's Zeitschr. xxix 273 ff.): 1<sup>st</sup> pl. aor. *jim-ama* from  $\sqrt{\text{gem-}}$  'go', 1<sup>st</sup> pl. pres. *hišc-amaidē* beside 3<sup>rd</sup> sing. act. *hi-sax-ti* (§ 540 p. 101), opt. *jam-y-ama* (§ 941 p. 486). For the Perf. examples are Avest. *-ama* in *daiḍy-ama*, Gr. *-αμεν* Goth. *-um* Lat. *-imus* O.Ir. *-ammar*, see § 844 p. 386. Lastly, for the Sigmatic aorist, Gr. *-σαμεν -σαμεθα* Lat. *-simus*, see § 820 p. 356, § 823 p. 361.

### § 1002. Aryan.

(1) Primary *-mas* and *-masi*. Both are kept in Sanskrit, but in Iranian only the latter is found. Skr. *s-mās s-māsi* Avest. *mahi* O.Pers. *a-mahy* 'sumus'. Skr. *bhārā-mas -masi* Avest. *barā-mahi* O.Pers. *ḡahyā-mahy* ('dicimur').

(2) Secondary and Perfect *-ma*, whose Vedic variant *-mā* may be compared with Goth. *-ma* Lith. *-mė(-s)*. Skr. *á-dhā-ma* Avest. (Gath. *dā-mā* from  $\sqrt{\text{dhē-}}$  'to place', Skr. *á-kar-ma* O.Pers. *a-kū-mā* from  $\sqrt{\text{ger-}}$  'make'; Avest. *jim-ama* (§ 1001). Opt. Skr. *syā-ma* Avest. *x'yā-ma jam-y-ama* (§ 1001), Skr. *bhārē-ma* Avest. *baraē-ma*. Further, the Aryan conjunctive always has *-ma*, by which the ind. and conj. pres. of thematic stems were distinguished): Skr. *bhārā-ma* Avest. *barā-ma*. Perfect *śu-śru-mā su-sru-ma* from  $\sqrt{\text{kṣey-}}$  'hear'; Avest. *daiḍy-ama* (§ 1001).

As in other languages, so in Sanskrit, the difference of primary and secondary endings was not strictly kept in the later language; thus we have in the Mahā-Bhārata imperf. *a-paśyāmas* 'we saw' and pres. *paśyāma* 'we see', and similarly 1<sup>st</sup> dual *syāvas* instead of *syāva* 'we both would be'.

§ 1003. Armenian. The ending of the indic. present suffix *-mē* is not clear; examples are *ta-mē* 'damus' *bere-mē* 'ferimus'; Bugge (Beitr. zur etym. Erl. der arm. Spr., Christiania 1889, p. 44) derives *-mē* from *-mes + v* (the particle *u*), cp. III § 313 p. 212 on the case-suffix *-ē* in *dsterē meē* etc. Still more obscure is the *-ē* of other tenses, as of aor. *tuaē* 'they gave'.

**Remark.** In explaining the endings of the 1<sup>st</sup> and 2<sup>nd</sup> plural (§ 1011) we must not forget the possibility of a personal pronoun being affixed, cp. Mod.Cymr. 1<sup>st</sup> pl. *carwn* Alban. 1<sup>st</sup> pl. *jena* § 1006. 2, O.Ir. 2<sup>nd</sup> pl. *adib* (§ 506 p. 72 f.). In considering the -*ik* of the 2<sup>nd</sup> plural, where *i* seems to come from *t* for -*te*, we must also remember that the 2<sup>nd</sup> pl. may have imitated the ending of the 1<sup>st</sup> plural, cp. O.Ir. *berthi* Lith. *sūkātė-s* §§ 1014, 1016. Compare Hübschmann, Kuhn's Zeitschr. xxiii 12.

§ 1004. Greek. In Doric, -*μες* (primary) becomes universal. E. g. *φέρο-μες* *ἴω-μες* *ἐ-στάσαμες* *ἀπ-εστάλακκαμες*. Elsewhere -*μεν* (secondary), as *γέρο-μεν* etc.

§ 1005. Italic. Latin has always -*mus* for \*-*mos* (primary), as *t-mus* *agi-mus* *sī-mus* *momordimus*. Examples of this person in the other Italic dialects are wanting, unless indeed Osc. *manafum* is 1<sup>st</sup> plural (see § 1000. 2 a p. 535).

§ 1006. Keltic.

(1) Primary. O.Ir. -*mi* for \*-*mesi* (or -*mēsi*): *ammi* 'sumus' for \**esmesi* or \**s-esmesi* (§ 506 p. 72 f.), *guidmi* 'we beg' (1<sup>st</sup> sing. -*guidiu*). -*mi* became -*me* when the preceding syllable had no palatal vowel (1<sup>st</sup> and 2<sup>nd</sup> conjugations); thus *berme* for \**bero-mi* \**bero-mesi*, *carme* for \**carā-mi* \**carā-mesi*. Then comes confusion of various kinds; *guidme* beside *guidmi*, and *tiagme* beside *tiagmi*.

(2) Secondary. O.Ir. -*m* for \*-*mo* or \*-*mos*, hardly for \*-*mom* \*-*mon* (§ 1000. 1. a, 2. a and b., p. 535). Indic. pres. *do-beram*, *no charam*, *do-lēcem*, and so in the *a*-conjunctive, -*beram* -*caram*.

The primary ending -*mi*, as the frequent spelling -*mmi* -*mmē* shows, had a hard, not a spirant *m*. This was irregular in forms with orig. vowel before the personal ending, and is due to the analogy of *ammi*, where *mm* = *sm*.<sup>1)</sup> But Cymric shows -*wn* in the pres. indicative, as *carwn* ('we will love'),

1) On the same principle, we find in Pali *dadamha* following *amha* for *asma* 'sumus', Prakrit *cifṭhamha* -*mho* following *amha* -*mho*; and in Prakrit there is a 1<sup>st</sup> sing. *gacchamhi* instead of *gacchāmi*. As regards the 1<sup>st</sup> plural something may be put down to the influence of the *s*-aorist ending (Skr. -*s-ma*), cp. Pali *apacamhā* beside *apacimhā* (E. Kuhn, Beitr. zur Pāli-Gramm., 109; Torp, Die Flexion des Pāli, 47).

i. e. *-wf* + the personal pronoun *n*-,<sup>1)</sup> and therefore had the regular spirant *m*; however, *ym* 'sumus' has hard *m*, for *sm*.

Of the secondary ending *-m* the reverse is true. *-m* in O.Ir. *do-beram* and the like is never written *-nm*, and therefore was spirant. Cymric however has *-m*, not *-f*, except in the indic. present; as conj. *carom*. As regards this Cymric *-m* Thurneysen writes: "It is possible that other forms with *-sm-* (*s*-aorist and injunctive) may have had something to do with the matter. There are many traces of *s*-forms in British dialects, which have not yet been properly explained".

#### § 1007. Germanic.

(1) O.H.G. *-mēs* = Idg. *\*-mēs* must, as the breathed *-s* shews, have originally belonged to the pr. Germ. unthematic present stems (cp. *gā-mēs*). It very soon spread to the hortative Injunctive, as *bera-mēs* (with variant *bera-m* like Goth. *baítra-m*, see § 909 p. 458), and then to the Indic. preterite, *bārumēs*, and then to the Optative, *bārīmēs*. Compare Braune, Ahd. Gramm.<sup>2</sup> pp. 223 f., and the works there cited.

(2) Goth. *-m* = Idg. *-me* or *-mo* in *vitum bērum baítra-m*. Goth. *-ma* = Idg. *-mē* or *-mō* in the optative: *baíraí-ma bērei-ma*. The West-Germ. *-m*, O.H.G. *wizzum bārum bera-m berē-m bārī-m*, may be equivalent either to *-m* or to *-ma* in Gothic (I § 661.2 pp. 517 ff.).

#### § 1008. Balto-Slavonic.

Lith. *-mė* = Idg. *-mē* (§ 1002.2. a) before the reflexive *-si* and *-s*: *sūko-mė-s sūka-mė-s*. The *-me* of *sūko-me sūka-me ei-mė* 'eamus' *eī-me* 'imus' may come from *-mē* by I § 664.3. p. 523. Perhaps however Idg. *\*-me* and *\*-mē* have run together into *-me*. The suffixes *-ma -mo-s* found in a few instances as variants of *-me* and *-mė-s* (Bezzenberger, in his Beiträge, II 268), and Lett. *ei-ma* 'we go' and 'let us go', are a re-formation in agreement with the dual *-va -vo-s* (§ 1030);

1) The personal pronoun is added in this way in the Albanian dialect of Škodra; e. g. *jena* 'sumus' instead of *jemi*. See G. Meyer, M. Hertz zum 70. Geburtstag, 1888, p. 89.

so too in the 2<sup>nd</sup> plural there is contamination with dual forms (§ 1016). Lett. *-mī(-s)* is to be connected with Pruss. *-mai* (*as-mai* 'we are' *turri-mai* 'we owe, should'), as also 2<sup>nd</sup> pl. *-tī(-s)* with Pruss. *-tai -tei -ti* (*as-tai es-tei as-ti* 'ye are' *druwē-tai* 'ye believe' *turri-ti* 'ye should'): the diphthong comes from the 1<sup>st</sup> and 2<sup>nd</sup> singular (§ 983 p. 522, § 991 p. 528).

The following endings may be regarded as proethnic Slavonic.

(1) *-me* = Idg. *-mes* or *-me*. Mod.Bulg. *sme* 'sumus' aor. *nesoh-me*. Little-Russ. dial. (in the Carpathians) *vydy-me*. Czech *js-me* 'sumus' *jíme* 'edimus' *nese-me* opt. *nesme*.

(2) *-mo* = Idg. *-mos* or *-mo*. Little-Russ. with the ind. present in *-mī*, *ješ-mo jimo*. Serv. and Mod.Sloven. also in other stems: Serv. *jes-mo ijemo* Mod.Slov. *s-mo jěmo*, Serv. and Mod.Slov. *plete-mo* opt. *pleti-mo*.

(3) *-mŭ* = Idg. *-mom* or *-mon*. In O.C.Sl. this is the usual ending: *jes-mŭ damŭ nese-mŭ* aor. *neso-mŭ* opt. *nesě-mŭ dadi-mŭ*. So in Great-Russ.: *nese-m dadi-m* 'damus'; Little-Russ. *nese-m* opt. *neši-m*; Pol. *niesie-m* (see below); Czech aor. *nesecho-m* imperf. *nesjěcho-m*.

(4) *-my* either from *-mōm* or *-mōn* (I § 92 p. 86 f.), or else modelled after *my* 'we' (cp. 1<sup>st</sup> dual *-vě*, as *jes-vě*, with *vě* 'we both', § 1030). O.Bulg. e. g. *věmy* beside *věmŭ*, *vidi-my* beside *vidi-mŭ*. Pol. *wiemy*, *niesiemy* beside *niesie-m*. East-Sorb. and Mod.Sorb. *věmy*.

It is uncertain how these endings were distributed in proethnic Slavonic. As regards *-mo* it should be observed that the accents justify an inference that it at first belonged, as it still does in Little-Russian, only to the indic. Present of verbs in *-mī*, and that it is only their analogy which produced Serv. *plete-mo* etc. The forms we find in modern dialects have been often affected by the fact that *-mŭ* ran into one with the *-mī* of the 1<sup>st</sup> singular; hence in Polish while *niesiem* exists beside *niesiemy* (1<sup>st</sup> sing. *niose*), we have only *wiemy* (1<sup>st</sup> sing. *wiem*) and *działamy* (1<sup>st</sup> sing. *działam*).

Thematic. O.C.Sl. pres. *nese-mŭ nese-vě* as against aor. *neso-mŭ neso-vě*. The former follow the analogy of *io*-stems such as *znaje-mŭ -vě*, where *e* is regular for *o* (I § 84 p. 80). In the aorist *o* remains, because there were no *io*-stems in the aorist.

#### 2<sup>ND</sup> PERSON PLURAL.

§ 1009. Proethnic Indo-Germanic. Only in Aryan do we see a pair of endings, one primary and the other secondary, Skr. *-tha* and *-ta* (cp. 2<sup>nd</sup> dual *-thas* and *-tam*). All the forms of European languages can be derived from the single one Idg. *-te*. Still it must be admitted that much darkness still hangs over the *tenuis aspiratae* in European languages (cp. I § 553 pp. 405 ff., II § 81 Rem. 2 p. 243, Bartholomae Stud. Idg. Spr. I 44).

Again Aryan, and Aryan alone, shows a special perfect ending, *-a*, which may be related to the Gr. *-τε* as Skr. *-ē* to Gr. *-ται* in the 3<sup>rd</sup> sing. perf. middle, and may possibly be identical with the *a* of the Sanskrit endings 2<sup>nd</sup> dual *-á-thur* 3<sup>rd</sup> dual *-á-tur* (§ 1038).

(1) Primary Skr. *-tha* Gr. *-τε* etc. Skr. *s-thá* Gr. *ἔσ-τε* Lith. *ēs-te* O.C.Sl. *jes-te*. Skr. *bhára-tha* Gr. *πέρι-τε* O.Ir. *do-beri-d* Goth. *batrī-þ* Lith. *vėža-te* O.C.Sl. *bere-te*.

(2) Secondary Skr. *-ta* Gr. *-τε* etc. Pret. Skr. *á-vida-ta* Gr. *ἔιδε-τε* O.C.Sl. (aor.) *nese-te*. Hortative Injunct. Skr. *bhára-ta* Gr. *πέρι-τε* Lat. *agi-te* O.Ir. *beri-d* Goth. *batrī-þ*. *s*-Aor. Skr. *á-dhā-s-ta* Gr. *ἔδεῖξα-τε* Lith. (injunct. as fut.) *dė-s-te* O.C.Sl. *dě-s-te*. Opt. Skr. *bhārē-ta* Gr. *πέποι-τε* Goth. *batrái-þ* O.C.Sl. *berě-te*.

(3) Perfect Skr. *-a* Gr. *-τε* etc. Skr. *vid-á* Gr. *ἴσ-τε* O.Ir. *gegnaid* Goth. *vitū-þ*.

#### § 1010. Aryan.

(1) Primary ending pr. Ar. *-tha*. Skr. *bhára-tha* Avest. *bara-þa*. Skr. *s-thá* Avest. Gath. *s-ta* (cp. *vōistā* = Skr. *vēttha* I § 475 p. 351).

(2) Secondary ending pr. Ar. *-ta*. Skr. *á-bhara-ta* Avest. *bara-ta*. Opt. Skr. *bhārē-ta* Avest. *baraē-ta*.

In Vedic we also meet with *-thana* and *-tana*, the latter very common with hortative forms: e. g. *s-thána váda-thana i-tana puni-tána*. *-na* is a particle, which, if my conjecture be right, is contained in other forms, namely 2<sup>nd</sup> sing. imper. Avest. *barana* and Skr. *gṛhāná* (§ 600 p. 143), and which may be akin to the *-ni* of the Aryan 1<sup>st</sup> sing. conj. in *-ani* (§ 977. 3 p. 518).

(3) Pr. Ar. *-a* in the Perfect. Skr. *ca-kr-á* (3<sup>rd</sup> sing. *ca-kār-a* 'he made'), Avest. *hañhān-a* from *han-* 'to present, earn' (§ 852 p. 402).

§ 1011. Armenian. All tenses and moods have *-ē* final; e. g. *berēk* 'fertis' for \**bere-ik*, *alaiē* 'molitis', aor. *ediē* 'ye placed'. The *i* of *-ik* appears to be the same as *t* in *-te*; for further discussion refer to the Remark to § 1003, on page 536.

§ 1012. Greek. Always *-τε*: *ἔσ-τε φέρε-τε φέροι-τε ἴστε τετρόφα-τε*.

Remark. The *-θε* of the Perfect forms Hom. ind. *πέποσθε* (Aristarchus *πίπασθε*) imper. *ἐγγήγοσθε ἄνωχθε* is not the Skr. *-tha*, but a middle ending.

§ 1013. Italic. In Latin *-te* only in the hortative Imperjunctive (Imper.): *fer-te agi-te*.

Elsewhere *-tis*: *es-tis agi-tis agā-tis sī-tis vīdis-tis*. That the relation of *agite* to *age* produced *agitis* beside *agis* (Osthoff, Zeitschr. f. österr. Gymn., 1880, p. 70), is less probable than that *-tis* (earlier \**-tes*) is really a dual ending (Skr. *-thas* Goth. *-ts*). Outside the imperative the forms with *-te*, which often elided their vowel, became too much like those of the 3<sup>rd</sup> singular; and so by the time that dual and plural had got confused and the feeling for the special dual sense of the endings in question was dulled, *-tis* was preferred to *-te* because it was clearer. Of course the relation of *agite* to *age* may have made it easier to use *agitis* as a plural of *agis*. In Lettic also, where as in Latin the dual number was discarded, the 2<sup>nd</sup> dual *ei-ta* remained in use as a plural form: 'ye go' and imper. 'go ye'. Compare further under § 967 p. 509, § 1034 on Umbr. *futu-to* 'estote', and § 1015 on O.H.G. *beret* 'fertis'.



On Pelign. *leze*, which is apparently 2<sup>nd</sup> plural, see Thurneysen Rhein. Mus. XLIII 352.

§ 1014. Keltic. Ir. *-d* for *-te* in conjunct inflexion: *do-berid* 'datis', conj. of *s*-aorist *for-tēsid* 'succurratis, succurretis'. So in the imperative: *berid* 'ferte'.

The absolute forms have *-thi* for their ending (*-the* for *-thi* in the 2<sup>nd</sup> conjugation, as in 1<sup>st</sup> pl. *-me* for *-mi*, see § 1006 p. 537); e. g. *ber-thi* for *\*berethi*, *lēcthi* for *\*lēč-thi*, *carthe* for *\*carā-thi*; by levelling, *berthe* (with a glance at *berme* too) *lēcthe*. This ending *-thi* is an imitation of *-mi*, as in Lithuanian *sūka-tė-s* imitates *sūka-mė-s* (§ 1016).<sup>1)</sup> On *udib* 'estis', see § 506 p. 72 f.

§ 1015. As far as the Germanic sound-laws go, either *-the* or *-te* may be taken as the form to start from. The consonant fared precisely like that of the 3<sup>rd</sup> sing. ending *-ti*, see § 998.1 p. 532. Goth. indic. pres. *baíri-þ* perf. *bēru-þ* opt. *baíraí-þ* *bērei-þ* like the 3<sup>rd</sup> sing. pres. *baíri-þ*. O.H.G. *ga-sihi-t* 'ye behold' (Monsee or Mondsee "Fragments", see Braune Ahd. Gr.<sup>2</sup> p. 1) perf. *bāru-t* opt. *berē-t* *bārī-t* like 3<sup>rd</sup> sing. pres. *biri-t*.

In the indic. present O.H.G. originally had *-i-* for its thematic vowel; and this remains in *ga-sihit* and a few other forms from the authority just cited. Alemannic *bera-t* with *-a-* following the 1<sup>st</sup> and 3<sup>rd</sup> plural (cp. Lith. *vėža-te* § 999.2 p. 533), which served to distinguish 2<sup>nd</sup> plural from 3<sup>rd</sup> singular.

The commonest in O.H.G. is the form *beret*. With Kögel (P.-B. Beitr. VIII 138) we may regard this as a dual form, either *\*bhere-thos* (Skr. *bhāra-thas* Goth. *baíra-ts*), or *\*bhere-tom* (Gr. *τέρε-ρον*), or *\*bhere-tā* (O.C.Sl. *bere-ta*); cp. §§ 1031 ff.

§ 1016. Balto-Slavonic.

Lith. *-te* and *-t*, as *ės-te* *vėža-te* (on *-a-* instead of *-e-*, see § 999.2 p. 533) pret. *vėžė-te*. The ending *-tė-s* in the reflexive

1) Just in the same way *\*faiz* *\*diz* became *faites dites* in Old French by analogy of *faines* and *dimes* (Neumann, Zeitschr. für rom. Phil., XIV 581, 584).

follows *-mé-s* beside *-me* in the 1<sup>st</sup> pl. (cp. § 1014). The endings *-to-s*, sometimes found in place of *-té-s*, and *-ta* in Lett. *ei-ta* 'ye go' or 'go ye', are dual; just as *-ma* and *-mo-s* in the 1<sup>st</sup> plural of Lith., which sometimes take the place of *-me* and *-mé-s*, and in Lett. *ei-ma*, have the dual vowel (§ 1008 p. 538 f.). On Lett. *-ti-s* and Pruss. *-tai -tei -ti*, see the same place.

Slavonic: *-te: jes-te nese-te aor. nese-te dě-s-te opt. nesě-te.*

### 3<sup>RD</sup> PERSON PLURAL.

§ 1017. Proethnic Indo-Germanic. We here deal with the *nt*-suffix only. On Skr. perf. *vid-úr* and like forms see §§ 1076 f. and 1079.

(1) After Consonants *-énti -ént* and *-ṇti -ṇt*, which appear to be related in the same way as *-és* and *-s* of the genitive singular. Compare footnote to page 50.

(a) *-énti* and *-ént*.

Primary *-énti*. *\*s-énti* 'are': Skr. *s-ánti* (Armen. *en*, cp. § 1019), Gr. Dor. *ἐντι* Att. *εἰσι*, Umbr. *s-ent* Osc. *s-et s-et*, O.Ir. *it* O.Cymr. *int*, Goth. *s-ind*. *\*d-énti* 'they eat' √ *ed-*: Skr. *ad-anti* O.C.Sl. (Russ.) *jad-ěti*. *\*mṛ-n-énti* beside 3<sup>rd</sup> sing. *\*mṛ-ná-ti* 'crushes, grinds to dust' (§ 598 p. 141): Skr. *mṛ-n-ánti*. *\*ṛ-nṇ-énti* beside 3<sup>rd</sup> sing. *\*ṛ-néṇ-ti* 'excites' (§§ 638 f. pp. 176 f.): Skr. *ṛ-nv-ánti*.

Secondary *-ént*. *\*s-ént*: Skr. *s-án ds-an* (cp. *gm-án á-gm-an*), with the particle *u*, *s-ánt-u*, Gr. Dor. *ἦν* for *\*ḥ(σ)-εν*, O.Bulg. *jad-ět-ŭ* with the particle *u* (but cp. § 1026). Skr. *á-śṛ-ṇ-an*, *á-su-nv-an*. Opt. *\*s(ḡ)-ént* 'may they be': Gr. *ἔιν* O.Lat. *si-ent*; of the same kind, apparently, is Skr. *duh-ty-án*, see § 941 p. 486, § 951 p. 493.

(b) *-ṇti* and *-ṇt*.

Primary *-ṇti*. *\*dé-d-ṇti* from √ *dō-* 'give': Skr. *dád-ati* O.C.Sl. (Russ.) *dad-ěti*. In Greek *-ᾶσι* for the Perfect, as *λε-λόγγ-ᾶσι*.

Secondary *-ṇt*. The type *\*dé-d-ṇt* is preserved in Aryan only as embodied along with the particle *u* in the Skr. *dá-d-at-u*.

In other cases *\*-at* in Sanskrit is replaced by *-ur* (*á-da-d-ur*), in Avestic by *-an* (*da-d-en*). Another form which comes in place here is the O.Bulg. *dad-ēt-ū* 'dant' (but cp. § 1026), and another is O.Sax. *ded-un* 'they did' from *√dhē-*, if it be a reduplicated imperfect (§ 545 p. 103, § 886 p. 433, § 1025). Then again some forms of the thematic aorist appear to have had *-pt* originally, as we are led to believe by Skr. part. nom. sing. *dhákṣat*;<sup>1)</sup> and so perhaps O.C.Sl. *-s-ę*, as *daṣę*, belongs to the same group, and O.H.G. *wiṣsun* if it is rightly compared with Gr. *ῥῶν* (§ 827 p. 365, § 907 p. 455). Lastly, our suffix should be claimed for the *oi*-optative: *\*bhéroī-pt*, instead of which we have in Skr. *bhárēy-ur* Avest. *baray-en* Gr. *φέρου-εν* Goth. *batrái-na*.

(2) After Sonants, *-nti* and *-nt*.

Primary *-nti*. *\*yē-nti* 'they blow': Skr. *vānti* Gr. *ἄεῖσι*; Armen. *ala-n* 'they grind', Lat. *ple-nt ama-nt*, O.Ir. *carit* 'they love', Goth. *salbō-nd*, O.C.Sl. (Russ.) *imāṭi* 'they have'. Long-vowel Conjunctive: Avest. *patā-nti* Gr. Dor. *φέρω-ντι* Att. *φέρουσι*. *\*bhero-nti* 'ferunt': Skr. *bhāra-nti* Armen. *bere-n* Gr. Dor. *φέρω-ντι* Lat. *feru-nt* O.Ir. *berit* Goth. *baira-nd* O.C.Sl. (Russ.) *beratŭ*.

Secondary *-nt*. Gr. *ἔ-μυγε-ν ἔγνω-ν*, O.Bulg. *imāt-ū* 'they have' (with the particle *u*). Long-vowel Conj.: Skr. *bhāra-n*, Osc. *deica-ns* 'dicant'. *\*bhéro-nt*: Skr. *bhāra-n á-bhara-n*, Gr. *φέρω-ν ἔφερο-ν*, O.C.Sl. *bq* for *\*bhyo-nt* (§ 525 p. 88) aor. *nesq*.

§ 1018. Aryan.

(1) After Consonants Idg. *-énti -ént* and *-pti -pt*.

(a) *-énti* and *-ént*.

Primary *-énti* = pr. Ar. *-ánti*. Skr. *s-ánti* Avest. *h-enti* O.Pers. *h-atiy*. Skr. *y-ánti* Avest. *y-ēinti*. Skr. *grbh-ñ-ánti* Avest. *ger<sup>h</sup>u-n-enti*. Skr. *yuñj-ánti* Avest. *mer<sup>h</sup>nc-inti* (I § 94 p. 89). Skr. *kṛ-ṇv-ánti* Avest. *ker<sup>h</sup>nv-anti*.

Secondary *-ént* = pr. Ar. *-ánt*. Skr. *s-án ds-an* Avest. *h-en* O.Pers. *ah-a*, Skr. *áy-an* O.Pers. *ay-a*. Aor. Skr. *gm-án*

1) For the 3<sup>rd</sup> plural of the *s*-Aorist with vowel gradation (§ 811 p. 348 f.), it is necessary to assume the ending *\*-s-ént*.

*á-gm-an* Avest. *g'm-en*; with *ā*-stems of our Classes I and X Sanskrit adopted the ending *-ur*, as *á-sth-ur á-g-ur* from *stha-* and *gā-*; but in Vedic there remain a few examples of *-an*, as *vy-asthan* (Bartholomae, Stud. zur idg. Sprachg. I 32 ff., II 64 ff.). Skr. *á-śy-ṇ-an á-yuñj-an á-kṛ-ṇv-an*. An Optative form of this kind is apparently Skr. *duhīy-án*; otherwise we have Skr. *s-y-úr* and Avest. *h-yān* = \**s-yā-nt*, no. (2).

(b) *-ṇti* and *-ṇt*.

Primary *-ṇti* = pr. Ar. *-ati*. Skr. *dá-dh-ati* Avest. Gath. *da-d-aiti*, Skr. *sa-śc-ati bí-bhr-ati dávi-dyut-ati*. Cp. part. nom. pl. *dá-dh-at-as* II § 126 p. 400. In the Avesta, *-ati* is usually exchanged for *-anti*, which showed the plural mark more clearly, as *da-ḥ-enti* (similarly in the part. *da-ḍ-ant-* instead of \**da-ḍ-at-*); cp. mid. *-antē* instead of *-aitē* § 1067. 1.

Secondary *-ṇt* = pr. Ar. *-at*, which remains in *-at-u* as Skr. *dá-d-atu* 'danto', and also seems to be represented in its unextended shape by four Avestic examples from the Gathas, viz. *da-d-aḥ za-z-aḥ jī-ger'z-aḥ daidy-aḥ* (Bartholomae, Kuhn's Zeitschr. xxix 280 ff., 291 f.), but elsewhere it is lost. It should be remembered that whilst *-ati* corresponds to *-anti* and *-nti*, *-at* stood in sharp contrast to *-an* and *-n*; and therefore *-at* did not suit the general types of 3<sup>rd</sup> pl. in the Aryan verb. In Sanskrit this is replaced by *-ur*, as *á-da-dh-ur á-bi-bhar-ur*,<sup>1)</sup> *s-aorist á-mats-ur á-tāriṣ-ur á-yāsiṣ-ur* (cp. § 1017. 1. b), opt. *bhārēy-ur*. But in Avestic we have *-an*, in the same way as we have *-anti* instead of *-ati*: *da-ḥ-en* (cp. *da-ḥ-enti*) opt. *baray-en*.

(2) After Sonants, Idg. *-nti* and *-nt*.

Primary *-nti*. Skr. *vā-nti* Avest. *vā-nti*. Skr. *bhāra-nti* Avest. *bara-inti* O.Pers. *baratiy*, Skr. *bhārāya-nti* Avest. *baraye-inti*. The long-vowel Conjunctive in Avestic has *-nti* and *-n*, as *patā-nti* and *patān*, but only *-n* in Sanskrit — *pāta-n*.

Secondary *-nt*. This form retains its *-t* before the particle

1) Ved. *abibhran* I regard as *a-bi-bhr-a-n*, i. e. as a thematic form (§ 539 p. 99).

*u*: Skr. *bhāra-ntu* Avest. *bara-ntu* 'ferunto' (§ 909 p. 458). Elsewhere *-n*. Skr. *á-bhara-n* Avest. *bare-n* O.Pers. *a-bara*. The short-vowel conjunctive always has this ending: Skr. *ás-a-n* Avest. *arəhen*. In place of *\*a-gā-n* (= Gr. *ἔ-βᾶ-ν*, beside 3<sup>rd</sup> sing. *á-gā-t* ἔ-βῆ) Sanskrit has *á-g-ur*, and similarly *á-y-ur* instead of *\*a-yā-n* (3<sup>rd</sup> sing. *á-yā-t*), answering to the form *á-dh-ur* = Avest. Gath. *d-ar̥*. But Avest. *dan* beside *d-ar̥* makes us infer such forms as *\*gān* = *βᾶ-ν* (Idg. *\*gā-nt*) — *dan* : *dā-ma* following *\*gān* : *gā-ma* — as in the optative, beside 1<sup>st</sup> pl. Gath. *x-yā-mā* was coined 3<sup>rd</sup> pl. *x-yē-n* = late Avestic *h-yān* (compare with this *h-yā-r̥*, also with strong form of optative suffix).

As regards the 3<sup>rd</sup> pl. with *-r* (Skr. *-ur* Avest. *-ar̥ -ar̥š*), see §§ 1076 f.

§ 1019. Armenian. The 3<sup>rd</sup> plural has *-n* always; this seems to represent a coincidence of *-nti* and *-nt*.

*ala-n* 'they grind' for *\*ala-nti*: cp. Lat. *juva-nt. en* 'sunt' for *\*s-enti*, but this must have been influenced by other forms of the paradigm (*em es* etc.), for by I § 63 p. 50 *\*in* was to be expected (cp. Bugge, Kuhn's Zeitschr. xxxii 71). *beren* 'ferunt' follows *en* like 1<sup>st</sup> sing. *berem* : *em* § 978. 1 p. 519.

*etūn* 'they gave', *edin* 'they placed', cp. Avest. *dā* § 1018. 2 above. But why not *\*etn* *\*edn* by I § 651. 1 p. 497?

§ 1020. Greek.

(1) After Consonants Idg. *-énti -ént* and *-ῃti -ῃt*.

(a) *-énti* and *-ént*.

Primary *-énti*. Dor. *ἐντι* Att. *εἰσι* instead of *\*ἐντι* = Idg. *\*s-énti* with smooth breathing following *εἰμι* etc. 1)

Secondary *-ént*. Doric and other dialects *ἦν* 'erant' for *\*ḡ(σ)-εν*: Skr. *s-án ás-an*; cp. § 502 p. 65 on the 3<sup>rd</sup> sing. *ἦεν ἦν*. *ἦ-Optative* *ἦ-εν εἰδεῖ-εν τιθεῖ-εν*; O.Lat. *si-ent*; on El. *συι-ἔαν* refer to § 944 p. 487.

(b) *-ῃti* and *-ῃt*.

Primary *-ῃti* = Gr. *-ᾷτι*. Instead of *\*ḡστ-ατι* *\*τιθ-ατι*

1) *εἰσι* 'eunt' in Theognis 716 is too uncertain to make it a ground for assuming pr. Gr. *\*ἔ-εντι* = Skr. *y-dnti*. See Osthoff, *M. U.* iv 288 f.

\**δίδ-ατι* (Skr. *bībhr-atī dādḥ-atī*) we find (Dor.) *ἴστα-ντι τιθε-ντι* *δίδο-ντι*, as in (2). But *-ατι* is preserved in the perfect, as Dor. *ἔθαύκ-ατι* (Hesych.), Phoc. *ἰεργτεύκ-ατι* Hom. *λε-λόγγ-ασι*, and I may suggest that this ending was taken from reduplicated present stems (cp. § 555 p. 108).

Secondary *-ητ* = Gr. *-α* is lost; all examples of secondary 3<sup>rd</sup> pl. took *-ν*. *ἔ-τι-θε-ν ἔ-δι-δο-ν* like *τί-θε-ντι*. Similarly \**ἑῖπ-α(τ)* 'they said' = \**μῆ-μῃ-ητ* gave way to *ἑῖπαν*, thus following no. 2 (§ 557 p. 109). Again, *-αν* got into the *s*-aorist, where originally either *-ént* (with roots that had gradation), or *-ητ*, seems to have been the ending; e. g. *ἴσ-αν ἔ-δειξ-αν* (instead of \**ἴσσο-εν ἔ-διξ-εν*?) \**ἑιδε-αν* (instead of \**ἑιδε-α*?); on the last see § 1021. The *οἰ*-optative took over the ending of the *ἰξ*-optative: *φῑρο-εν* instead of \**φῑροκ-α* following *εἰεν* (El. *-οιαν*, e. g. *παρ-βαῖνοιαν*, seems to have arisen by regular change from *-οιεν* as *συν-έαν ἐπι-θείαν* from \**-εεν -θειεν*); side by side with which Delphic has *φῑρο-ν*, analogical like mid. *φῑρο-ντο* (§ 1068).

(2) After Sonants Idg. *-nti* and *-nt*.

Primary *-nti*. *ἄεισι* 'they blow' for \**ἄφη-ντι*: Skr. *vd-nti*; Lesb. *φιλεισι* 'they love' *διψασι* 'they thirst': Lat. *ple-nt vide-nt juva-nt*. Conj. Dor. *φῑρω-ντι* Att. *φῑρωσι* (§ 923 p. 471). Dor. El. N.-W. Gr. *φῑρο-ντι* Att. *φῑρουσι*.

Secondary *-nt* = Gr. *-ν*. *ἔ-δρᾶ-ν ἔ-τλᾶ-ν ἔ-γνο-ν ἔ-μιγε-ν ἔ-γνωσθε-ν* for \**ἔ-δρᾶ-ντ* etc., whence also *ε-φῦ-ν*.

The vowel before the personal ending is sometimes long instead of short. The reason is undecided. Examples are Hom. *μῑνῶθην* Cret. *διελέγην* Hom. *ἔφῦν*.

Remark. In Morph. Unt. i 72 f., I assumed in agreement with G. Meyer and others that the long vowel was taken from other forms of the paradigm, as for instance it must be explained in *πλῆντο ἄντα* and other like them. Solmsen now tries to make out a case for believing that *-ην -ων* etc. arose at the sentence-end, and that *ἔλεγεν* replaced the regular in-sentence form \**ἔλεγετ* on the analogy of *ἔλέγην* (Bezz. Beitr. xvii 329 ff.).

These endings *-ντι* and *-ν* spread to all stems with

gradation that ended in *-α*, *-ε*, or *δ*. *τι-θε-ντι* *ε-τι-θε-ν* *ε-θε-ν*<sup>1)</sup>, *δι-δο-ντι* *ε-δι-δο-ν* *ε-δο-ν* (cp. 1. *b*). Dor. *φα-ντι* Att. *φάσι*, *φά-ν*. *δάμνᾱσι* (*δαμνᾱσι*) for *\*δαμ-να-ντι* instead of *\*δαμ-ν-εντι*. By analogy *ῥήγνῳσι* (*ῥηγνῳσι*) for *\*φρηγ-νυ-ντι* instead of *\*φρηγ-νυ(φ)-εντι*.

§ 1021. The ending *-αν*, which developed first in Greek (§ 1020. 1. *b*), spread widely and was the model for many innovations.

(1) *-αν* instead of *-εν* and instead of *-α* became usual in the Indicative of stems which did not end in *-α*, *-ε*, *-δ*. Some have been already mentioned: *εἰπ-αν*, *ἴπ-αν* *ε-διεἰ-αν* *\*φειδε-αν* (by analogy, the ind. perf. *γέ-γον-αν* § 844 p. 386). So Boeot. *παρ-εῖαν* for *\*-η(σ)-αν* (I § 72 p. 63) from *✓es-* 'to be', Hom. Aeol. *ἔχευ-αν* (§ 504 p. 67 f.) and others. Also opt. *δεῖξιαν* instead of *\*δεῖξει-εν* as we should expect (§ 944 p. 489).

In the tendency which exchanged *-εν* for *-αν* the middle ending *-ατο* may have had some influence, e. g. in *ἔχεναι* (instead of *\*ἔ-χυν-αν*), beside which there once was a 3<sup>rd</sup> pl. middle *\*ἔ-χυν-ατο* (cp. 3<sup>rd</sup> sing. *ἔ-χυν-το*).

That *-εν* remains in the Opt., as *τιθεῖ-εν*, must be put down to the strong stem *τιθειη-* (cp. *ἔμιγεν* : *ε-μιγη-*, *ἔτιθεν* : *ε-τιθη-*). Then *τιθει-εν* propped up *φέροι-εν* despite the mid. *φεροί-ατο*.

(2) *\*ῆ-αν* 'erant' (Boeot. *παρ-εῖαν*) under the influence of *ῆσ-τε* *ῆσ-τον* *ῆσ-την* became *ῆσ-αν*, which may be compared with *ἔσ-μην* (§ 502 p. 65). Similarly *φείδεσαν* *ῆδεσαν* depend upon a lost *\*φείδεσ-τε* (§ 836 p. 372); the form was once *\*φειδε-αν* (cp. § 1020. 1. *b*). Then the ending *-σαν* became familiar, and was detached as a type, beginning partly with these, and partly with *σ*-aorists of the form *ἔπηξαν* (to whose system once belonged *\*ἔπακμεν* *\*ἔπακτε*, see § 820 p. 357); examples are *ἔφα-σαν* *ε-τίθε-σαν* *ε-θε-σαν* *ε-γνώ-σαν* *ε-μίγη-σαν* *ε-δικασθή-σαν* (Hellenistic also *ελάβοσαν* *εἵπασαν* and the like),

1) Although we must assume Idg. *\*dh-énti* *\*é-dh-ent*, we can hardly venture to say that the Greek form is derived straight from this ground-form.

plpf. *ἔ-σαν-σαν*, opt. *εἴη-σαν*, imper. *ἔστω-σαν*. The wider use of *-σαν* was assisted by a wish to make the number of syllables the same in 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup> plural (*ἔφασαν* : *ἔφαμεν ἔφατε*).

(3) On the analogy of *ἵστα-ν* to *ἵστα-ντι*, *ἔ-τιθέ-ν* to *τίθε-ντι*, *ἔ-δίδο-ν* to *δίδο-ντι*, a primary *-αντι* sprang up as complement to *-αν*. Beside *\*ἦαν* 'erant' then stands the pres. Ion. *ἔασι*; we also have *ἱάσι* 'eunt', *ῥηγνύ-ασι*. Beside *ἴσαν*, the pres. (perf.) *ἴσασσι ἴασσι* 'sciunt' Dor. *ἴσαντι* (§ 863 p. 411). Also perf. *δε-δί-ασι τε-τράφ-ασι* Dor. *τε-θέκ-αντι*.

Doubtless something is due to the analogy of the middle *-αται*, as *ῥηγνύ-ασι* : *\*ῥηγνύ-αται* (like *εἰρύ-αται* § 1068.1. a), *τετράφ-ασι* : *τετράφ-αται*. For the Perfect cp. also the ending *-ατι*, § 1020.1. b.

(4) Following *ἔ-ασι* beside *ἔ-μεν*, *ῥηγνύ-ασι* beside *ῥήγνυ-μεν*, *δεδί-ασι* beside *δέδκ-μεν* sprang up *τιθέ-ασι δίδο-ασι* *\*ιστά-ασι* *ιστῶσι* as 3<sup>rd</sup> pl. to *τίθε-μεν δίδο-μεν ἵστα-μεν*, Hom. *βεβά-ασι* Hom. Att. *\*ἔστα-ασι*<sup>1)</sup> *ἔστῶσι* to *βέβα-μεν ἔστα-μεν*, Boeot. *δεδό-ανθι* (on the θ see § 1068). Similarly Boeot. *ἀν-ί-θταν* (*ἔθειαν ἔθιαν*), by which form the number of syllables in the 3<sup>rd</sup> plural was made to agree with the 1<sup>st</sup> and 2<sup>nd</sup> plural (as with *-σαν*, see no. 2. above).

Remark. Thess. imperf. *ἔν-σπαρίσασεν* aor. *ἰδοῦσεν ἀν-εθελῶν ἔταξέν* are not yet properly explained. If their *-εν -ιν* = pr. Gr. *-εν*, their model must have been *\*ἦ-εν* 'erant' (§ 1020.1. a) *ἔ-εν* *ῥή-εν*; if again *-εν (-ιν)* is regular in Thessalian for *-αν* (Prellwitz, De dial. Thess., 9), they fall into line with Boeot. *ἔθι-αν* mentioned above. Solmsen conjectures that the endings *-ον -αν* were pronounced *-οφ -αφ*, to get an equal number of syllables with the 1<sup>st</sup> and 2<sup>nd</sup> plural, and that *-ον -αν -αιν* are various attempts to write these sounds (Bezz. Beitr. xvii 336).

Late Greek new forms in the 3<sup>rd</sup> pl. are treated by Buresch in the Rhein. Mus., XLVI 193 ff.

§ 1022. *Italic*. In Umbro-Samnitic the endings *\*-nti* and *\*-nt* become *-nt* and *-ns* respectively, and are thus kept distinct. But in Latin the primary ending *-nt* was made universal in

1) This uncontracted form is wanting in Epic, because it did not suit the dactylic metre.



prehistoric times in the same way, though earlier, as the primary *-t* can be seen before our eyes usurping the place of the secondary *-d* (§ 996 p. 531). The form *quotiens*: Skr. *ktyat* (III § 225 'p. 106) makes it probable that Latin once had Umbr.-Samn. *-ns* = Idg. *\*-nt*.

The complete disappearance of *-i* from *-nti* in Italic is remarkable; the same thing is seen with the ending *-ti* (§ 996 p. 531).

Along with *-ns* Latin must once have had a sentence doublet *-n*, if Johansson is right in saying that O.Lat. *danunt* is really *\*dan* + the ending of *legunt* which it took by analogy (Akadem. afhandl. til Prof. S. Bugge, pp. 29 ff.); compare § 1023 on *seder-unt*, and the O.H.G. and A.S. *sind-un* instead of *sind*, § 1025. Similarly *ex-plēnunt prōd-inunt* would stand for *\*plen \*in* (cp. the form *int* beside *eunt*, formed complementary to *imus itis* as *sint* was to *sīmus sītis*, instead of *sient*). The same *-n* may perhaps be the ending of Umbr. *staheren* 'stabunt'.

Remark. I will not pass unmentioned Danielsson's conjecture (in Pauli's Altital. Stud. III 148) that *-ns* originally belonged to the indic. perfect only, and that *-s* is the same as we see in Avest. *-ar<sup>as</sup>* (§ 1077). Compare further Johansson, Bezz. Beitr. XVIII 49.

(1) The post-consonantal Idg. *-énti -ént* and *-ṛti -ṛt* run together into *-ent(i) -ens* in Italic.

(a) *-énti* and *-ént*.

Primary *-énti* = Ital. *-ent(i)*. Umbr. *s-ent* Osc. set *set* 'sunt'.

Secondary *-ént* = Ital. *-ens*. Opt. Lat. *si-ent* instead of *\*si-ens*; new form *sint* following *sī-mus sīt-tis*, so also Umbr. *sins* *sis* with the secondary ending kept. Lat. *vidērint* like *sint*.

(b) *-ṛti* and *-ṛt*.

Primary *-ṛti* = Ital. *-ent(i)*. Since in Umbr.-Samn. the orig. *-o-nt(i)* has disappeared and given place to *-ent(i)* (see below), we may assume as 3<sup>rd</sup> pl. to *di-d-e-t* 'dat' (§ 553 p. 107) the form *\*dident*, which would be a parallel to Skr. *dā-d-ati*.

Secondary *-ṛt* = Ital. *-ens* seems to be lost.

(2) After Sonants *-nti* or *-nt*.

Primary *-nti* Ital. *-nt(i)*. Lat. *ple-nt fla-nt vide-nt ama-nt*, Umbr. *furfant* 'februarant'. Hence by analogy Lat. *da-nt* like Gr. *ἔδο-ν* § 1020 p. 548, *i-nt* (beside *eu-nt*). Lat. *feru-nt su-nt*: Skr. *bhāra-nti* O.Russ. *sqtī*. Thematic Conjunctive Lat. *eru-nt*.

Secondary *-nt* = Ital. *-ns*, instead of which Latin has the primary *-nt*. Osc. *fu-fa-ns* 'erant' Lat. *ama-ba-nt*. Conj. Umbr. *dirsa-ns dirsas* 'dent' Osc. *deica-ns* 'dicant', Lat. *dīca-nt*; Osc. *herrī-ns* 'caperent' *trībarakattī-ns* 'aedificaverint', Lat. *age-nt agere-nt*. Also, with *-n* for *-nt*, Lat. *ex-plēn-unt* etc. according to Johansson's explanation, for which see above p. 550.

In Umbr.-Samn. often *-ent*, where *-ont* is expected. Osc. *fiiet* 'fiunt'. Thematic Conjunct. of the *s*-Aor.: Umbr. *furent* 'erunt' Osc. *censazet* 'censebunt' (§ 824 p. 362), and these served as the model for fut. pf. Umbr. *benurent* 'venerint' Osc. *trībarakattuset* 'aedificaverint' (§ 872 p. 421). Of the same kind are perhaps Umbr. *eitipes* 'decreverunt' Osc. *prufattens* 'probaverunt', cp. the thematic 3<sup>rd</sup> sing. *prufatted* (§ 867 p. 416, §§ 872 f. pp. 420 ff.). The spread of *-ent* (*-ens*) was probably not due to the solitary form *sent*; probably there also existed *\*ed-ent* 'they eat' O.Russ. *jad-ētī*, forms of the XII<sup>th</sup> Present Class in *-n-ent* = Skr. *-n-ānti*, of the XVII<sup>th</sup> in *-ny-ent* = Skr. *-no-ānti* (*-nuv-ānti*), and again the form *\*did-ent* = Skr. *dād-ati* (see above, 1. b).

§ 1023. The Perfect in Latin shows the endings *-erunt* *-ērunt* and *-ēre*; to which we must add from inscr. *ded-rot ded-ro* C. I. L. 1 173, 177, and some other forms which have been gathered by Deecke (De redupl. Lat. lingu. praeterito, pp. 17 f.). Though it is natural enough to derive *-erunt*, beside *-is-tis* *-is-tī*, from *\*-is-ont(i)* (§ 841 p. 378), still the *r* of these 3<sup>rd</sup> pl. endings is doubtless connected in some part at least with the Skr. *-ur*, Avest. *-ar*, Skr. mid. *-rē*, and others of like nature (§§ 1076 ff.). With the extension of the *-r*-form by *-ont* compare Skr. *-r-anta* *-r-atē* *-r-ata* (on the form *-r-an*,

which looks as though it were most closely connected, refer to § 1078.8). That there is no doubt of its being a middle *-r*-form extended by the active *nt*-suffix is shewn by the 1<sup>st</sup> sing. *tutud-t* (§ 1044), which has the middle ending. For further conjectures I refer to Osthoff, Perfect 210 ff., 609 f.; Windisch, Über die Verbalformen mit dem Charakter *B*, pp. 47 f.; Henry, Mém. Soc. Ling. vi 373 ff.; Zimmer, Kuhn's Zeitschr. xxx 281 ff.; Schweizer-Sidler and Surber Lat. Gramm. i<sup>2</sup> 139; Stolz, Lat. Gr.<sup>2</sup> 372 f.; Bartholomae, Stud. Idg. Spr. II 195 ff.

#### § 1024. Keltic.

Primary Ending. Idg. *-énti* remains in O.Ir. *it* O.Cymr. *int* 'they are' for pr. Kelt. *\*s-enti*, see footnote to II p. 196 (in the light of which I § 243.3 p. 202 must be corrected). Elsewhere only Idg. *-nti*. O.Ir. *berit*: Gr. *φέρο-ντι*. *carit* for *\*carā-nti*: cp. Lat. *ama-nt*. Conjunctive *berit*: Lat. *fera-nt*; cp. Mid.Cymr. *gwelo-nt* 'videant'. *lenit* 'they hold' for *\*līna-nti*, as Gr. *δαμῶσι* (*δαμῶσι*) for *\*δαμ-va-ντι* (§ 1020 p. 548), instead of Idg. *\*-n-énti*.

Side by side runs the Conjunct inflexion: indic. *do-berat*, in the oldest glosses *-ot* is still found, as *tu-thegot* = later *do-thiagat* 'they go away'; *no charat* 'amant'; conj. *do-berat*. Whether these are descended straight from forms in Idg. *-nt* (*\*bero-nt* *\*cara-nt* *\*berā-nt*), or are middle forms with the Idg. ending *-nto*, has not been made out (see I § 657.1 p. 506, and § 82.1 p. 76); the second alternative however seems better. Zimmer, who identifies *-berat* with Gr. *φέρο-ντο*, explains the active function of this form by supposing that *berit* represents a confluence of two, *\*bero-nti* and *\*bero-ntai* (Kuhn's Zeitschr. xxx 236).

#### § 1025. Germanic.

(1) After Consonants, *-énti* *-ént* and *-yti* *-yt*.

(a) Primary *-énti* = pr. Germ. *-inþi*. Goth. *sind* O.H.G. *sint* 'they are' for pr. Germ. *\*sindi*, which is either the unaccented form of the word (cp. I § 669 p. 534) or has taken the place of the regular *\*sinþi* = Goth. *\*sinþ* O.H.G.

\**sind* on the analogy of *batrand berant*; O.H.G. also *sint-un sind-un* (O.Sax. and A.S. *sind-un*) with an additional ending following 1<sup>st</sup> pl. *birum* 2<sup>nd</sup> pl. *birut*. Secondary *-ént* is quite lost.

(b) Primary *-pti* is lost. Secondary *-pt* = Germ. *-un* is perhaps original in O.Sax. *ded-un* 'they did' O.H.G. *wissun* 'they knew' (§ 1017. 1. b p. 544). *-un* is always found in the 3<sup>rd</sup> pl. of both strong and weak Perfect, and also sometimes in the Present: e. g. Goth. *skatiskaid-un bër-un* O.H.G. *sciad-un bār-un*, Goth. *nasidēd-un* O.H.G. *nerit-un*, Goth. *vit-un* O.H.G. *wizzun* (§ 508 p. 74), O.Icel. *er-o er-u* 'they are'. Perhaps these endings have been under the influence of the middle \**-undaḡ* \**-unda* = Idg. *-ptai -pto*, which we may assume to have lasted down to protoethnic Germanic.

(2) After Sonants *-nti* and *-nt*.

Primary *-nti*. Goth. *salbō-nd* O.H.G. *salbō-nt*, O.H.G. *habē-nt*. Goth. *baira-nd* O.H.G. *bera-nt*; instead of the latter, Frank. *berent*, formed doubtless like the 1<sup>st</sup> pl. *beremēs* (instead of *beramēs*) under the combined influence of the 2<sup>nd</sup> plural *beret* (§ 1035) and present stems with *-jo-* (*suoche-mēs -nt*).

Secondary *-nt*. Perhaps it is old in O.H.G. conj. *salbō-n* like O.Ir. *-carat* 'ament' (§ 930 p. 476). Further, \**-nt*, but not original, in all optatives, as O.H.G. *s-ī-n bār-ī-n*, which are to be compared with Lat. *s-i-nt* instead of *s-i-ent* (it is hardly likely that *sīn* is for \**s-ij-inp* = Idg. \**s-ij-ént*), and O.H.G. *berē-n* (instead of Idg. \**bhéroi-pt*), which falls in line with Gr. *φέρου-ν* (§ 1020. 1. b p. 547). Gothic in the optative shows *-na*, *salbō-na bērei-na bairái-na*; and the *-n* of Old Swedish must come from *-na* (cp. Kock, P.-B. Beitr. xv 244 ff.), while the W.-Germ. *-n* may possibly have once been followed by a vowel, now lost. This *-na* displaced *-n* = Idg. \**-nt* on the analogy of the 1<sup>st</sup> plural *-ma* (§ 1007. 2 p. 538). I suggest that in the 1<sup>st</sup> plural of these forms there were first two parallel suffixes *-ma* and *-m*, and that this fact produced *-na* beside *-n*; then the fuller form won the day in all persons.

§ 1026. Slavonic<sup>1</sup>). The variation of (O.Russ.) *-nti*

1) In Baltic, the 3<sup>rd</sup> singular did for 3<sup>rd</sup> plural too; see § 999 p. 533.

and (O.Bulg.) *-ntü* (= *nt* + particle *u*) ran parallel to that of *-ñ* and *-t-ü* in the 3<sup>rd</sup> sing., see § 999 p. 532 f.

(1) After consonants, *-énti -ént* and *-ñti -ñt*, both running into *-etñ -e*.

(a) Primary *-énti* = *-etñ*. O.C.Sl. (Russ.) *jad-etñ*: Skr. *ad-anti*. Secondary *-ént* in O.Bulg. *jad-et-ü* (but cp. below).

(b) Primary *-ñti* = *-etñ*. O.C.Sl. (Russ.) *dad-etñ*: Skr. *dád-ati*. Secondary *-ñt* in O.Bulg. *dad-et-ü* like Skr. *dád-at-u* (but cp. below) and perhaps in the *-e* of *s*-Aorists, as O.C.Sl. *dašę* (§ 1017. 1. b p. 543 f).

(2) After sonants, *-nti* and *-nt*.

Primary *-nti*. O.C.Sl. (Russ.) *imaññ* beside 3<sup>rd</sup> sing. *ima-ñ*, *beraññ saññ znajaññ*.

Secondary *-nt*. Aor. O.C.Sl. *nesq*, injunct. *bq* for *\*bhñ-o-nt* (§ 523 p. 87), *badaq* (§ 909 p. 458). With the particle *u*, O.Bulg. *imaññ beraññ saññ znajaññ*.

On *smrñdeññ -etñ* for *\*-inti \*-int-u*, see § 637 Rem. p. 176.

If in proethnic Slavonic the *mi*-presents had *-ññ*, the rest *-ntü* (*jadetñ — beraññ*), and if levelling took place in different directions in the several dialects (cp. § 999 p. 534 on *-ñ* and *-tñ* in the 3<sup>rd</sup> singular), O.Bulg. *jadetñ* could not be brought in evidence for Idg. *-ént* (1. a), nor O.Bulg. *dadetñ* for Idg. *-ñt* (1. b).

#### 1<sup>ST</sup> PERSON DUAL.

§ 1027. Proethnic Indo-Germanic. The suffix began with *u-* and shows in its ending some kinship with the 1<sup>st</sup> plural suffixes beginning with *m-*. It can only be traced in Aryan, Germanic, and Balto-Slavonic.

(1) Primary forms *-yes -yos* and *-yesi -yosi*. Skr. *s-vás bhára-vas*, Avest. Gath. *us-vahñ* (3<sup>rd</sup> sing. *vaš-tñ* 'wishes'). Also doubtless Goth. *batrōs salbōs*, cp. § 1029.

(2) Secondary or Perfect forms *-uē -uō*. Skr. *á-bhara-va*. Goth. opt. *batrdi-va*; perf. *bēru* for *\*bēru-u(i)* or *-u(a)*, possibly for *\*bēr-uñi* or *-uñ* with a form of suffix that makes a parallel to *-ñme -ñmo* (= Goth. *-um?*); cp. § 1001 p. 535. Lith. pret. *sùko-va* refl. *-ro-s*, O.C.Sl. aor. *vezo-vě* (but cp. § 1030).

§ 1028. Aryan. In Sanskrit only *-vas* and *-va*, in Avestic only *-vahī* and *-va* are found. That Sanskrit has no *-vasi*, Avestic no *-vō*, may be considered an accident. For examples see § 1027; I add Avest. injunct. *jvāva* i. e. *jvā-va* from Ar. *jīv-* 'to live' (Bartholomae Handb. § 91a Anm. 4, p. 40).

§ 1029. Germanic.

The primary form appears to occur in Goth. *batrōs* (3<sup>rd</sup> sing. *batrī-p*) *salbōs* (3<sup>rd</sup> sing. *salbō-p*), cp. 1<sup>st</sup> pl. O.H.G. *-mēs*. *salbōs* perhaps for *\*salbō-ys* (cp. Streitberg, Die germ. Compar. auf *-ōz-*, p. 9 as against I § 181 Rem. p. 159). Instead of *bairōs* we should expect *\*batráus*. To assume an Idg. ground-form *\*berōues* on the strength of Goth. *bairōs*, as Streitberg does (Zur germ. Spr., 108) seems to me to be open to criticism.

Secondary forms. Opt. Goth. *batrái-va* like 1<sup>st</sup> pl. *batrái-ma*. Perf. *bēru* see § 1027; similarly Norse Run. *waritu* for *\*writ-u* 'we both scratched, or wrote'.

A neat conjecture is that of van Helten (P.-B. Beitr. xv 472), who sees a 1<sup>st</sup> dual injunct. aorist in O.Sax. *wita* 'come along, very well' orig. 'tendamus', for *\*wita-w-*. Compare 1<sup>st</sup> pl. A.S. *wuton* 'come along' § 532 p. 94.

§ 1030. Balto-Slavonic.

Lith. *ēs-va sùka-va* reflex. *sùka-vo-s*, cp. 2<sup>nd</sup> dual *sùka-ta sùka-to-s*. *-vō* is a secondary ending like *-mé* (*-mé-s -me*) in the 1<sup>st</sup> plural. But *-vō* is doubtless not = Idg. *\*-uō* (for which we ought rather to have *-vā*), but a transformation of the Idg. secondary endings on the analogy of the 2<sup>nd</sup> dual (cp. Slav. *-va* below).

O.C.Sl. *-vě*: *jes-vě veze-vě* aor. *vezo-vě* opt. *vezě-vě*. As representing Idg. *\*-uē* we expect *-vi* (cp. *mati* 'mother' I § 76 p. 66). There seems therefore to have been an imitation of *vě* 'we two' (cp. § 1008 p. 539 on 1<sup>st</sup> pl. *-my*). The ending *-va*, rare in O.C.Sl., more common in Mod.Slov. and Czech, I prefer to regard as an imitation of *-ta* (2<sup>nd</sup> dual) than as representing Idg. *\*-uō* (cp. above Lith. *-va*). In Mod.Slovenian, which has *-vê* and *-va* both, a difference of gender has developed between them, because it so happened that there were feminine words

like *racē* (III § 286 p. 194) and masculines like *vlūka* (III § 285 p. 193), and *vē* and *va* were grouped accordingly (cp. what is said of *-tē* in § 1036).

## 2<sup>ND</sup> PERSON DUAL.

§ 1031. Proethnic Indo-Germanic.

(1) Primary ending something like *\*-thes* *\*-thos*; observe that the aspirate rests on the authority of Aryan only; the same is true of the 2<sup>nd</sup> plural (§ 1009 p. 540). Skr. *s-thás bhāra-thas*. Lat. *es-tis agi-tis* (cp. § 1034). Goth. *batra-ts* (cp. § 1035).

(2) Secondary or Perfect forms.

(a) *-tā*. Lith. pret. *sūko-ta* reflex. *-to-s*, O.C.Sl. aor. *veze-ta*. And, no doubt, Umbr. *futu-to* 'estote' (§ 1034).

(b) *-tom* (also *-tem*?). Skr. *ā-bhara-tam*. Gr. *ἐ-φέρε-ρον*.

§ 1032. Aryan. Skr. primary *-thas*: *s-thás bhāra-thas*; secondary *-tam*: *ās-tam ā-bhara-tam*. The Avestic forms in *-pō* and *-tem*, which answer to these, are used for the 3<sup>rd</sup> dual.

On Skr. *-āthur* in the Perfect, see § 1038.

§ 1033. Greek. The secondary ending *-ρον* drove out the primary in prehistoric times (cp. the levelling out of all but *-μεν* in the 1<sup>st</sup> plural, § 1004 p. 537): pret. *ἦσ-ρον ἐ-φέρε-ρον*, pres. *ἔσ-ρὸν φέρε-ρον*.

A consequence of the use of *-ρον* for both 2<sup>nd</sup> and 3<sup>rd</sup> dual in primary tenses was that the same was done in historic tenses, where *-ρον* belonged properly to the 2<sup>nd</sup> dual and *-σαν* (Ion.-Att. *-την*) to the third. Thus we get *ἐφέρερον* for both persons, and by similar reasoning *ἐφερέτην* for both also.

§ 1034. Italic. Lat. *es-tis agi-tis agē-bātis sī-tis* are probably dual forms; see § 1013 p. 541.

The secondary ending *-tā* may have taken plural use in Umbrian forms like *futu-to* 'estote', for which see § 967 p. 509, and § 1040.

§ 1035. Germanic. The primary ending is represented by Goth. *-ts*, which at the same time acted as secondary:

*baira-ts* (-a- instead of -i-, cp. O.H.G. 2<sup>nd</sup> pl. *bera-t* § 1015 p. 542) perf. *beru-ts* opt. *vilei-ts*. On the -t of -ts — for which \*-ps would be expected — see I p. 406 footnote 1, Kluge in Paul's Grundr. I 324 (§ 10. 1. b), and Johansson Kuhn's Zeitschr. xxx 554 f.

The O.H.G. 2<sup>nd</sup> pl. *bere-t* 'fertis', which cannot be explained as being for Idg. \**bere-t(h)e*, may be a dual form. As far as sound-laws go, it may be compared with any of these three, Skr. *bhāra-thas bhāra-tam* or O.C.Sl. *bere-ta*, see § 1015 p. 542.

### § 1036. Balto-Slavonic.

Lithuanian has the secondary ending -ta (reflexive -tō-s) = Idg. -ta as its only form: *sūko-ta*, *sūka-ta* (instead of \**suke-ta*, see § 999. 2 p. 533), *ēs-ta*.

So also Slavonic: aor. *veze-ta* opt. *vezē-ta* pres. *veze-ta* *jes-ta*. A few instances of -tē are found, as also in the 3<sup>rd</sup> dual, probably in imitation of -vē in the 1<sup>st</sup> dual; so by reverse attraction -va is found instead of -vē (§ 1030 p. 555). -tē in the 2<sup>nd</sup> and 3<sup>rd</sup> dual is used where the subject is feminine, as we saw in the case of -vē (loc. cit.).

### 3<sup>RD</sup> PERSON DUAL.

§ 1037. Proethnic Indo-Germanic. This person is only preserved in Aryan, Greek, and Slavonic (as regards Lithuanian see § 999 p. 532 f.), which makes it difficult to determine what suffixes were used in the parent language. The only thing certain is that -tām is nothing but secondary: Skr. *ās-tām* Gr. ἤσ-την.

### § 1038. Aryan.

Primary ending pr. Ar. -tas: Skr. *bhāra-tas* Avest. *bara-tō*. Avest. *yūidyā-pō* 'they both fight' shows the 2<sup>nd</sup> dual ending.

Secondary, pr. Ar. -tām. Skr. *ā-bhara-tām*. In Avestic always -tem, the ending of the 2<sup>nd</sup> dual, as *ai-tem* 'they both went', just as in Greek we see -ρον in place of -ραν (§ 1039).

In the Perfect pr. Ar. -atyr, Skr. -átur Avest. -atar<sup>o</sup>: Skr. *ca-kr-átur sēd-átur da-d-átur*; Avest. *yaft-atar<sup>o</sup>* (from *yat-* 'to stretch, strive to reach'), beside this Gath. *vaocātar<sup>o</sup>* (from *vac-*



'to speak'), where *a*, we may conjecture, comes from the middle suffix *-aitē* (*maman-aitē*). The *r*-ending is undoubtedly borrowed from the 3<sup>rd</sup> pl. in *-r* (Skr. *-ur* Avest. *-ar*<sup>o</sup>, § 1077), and the Skr. *-áthur* of the 2<sup>nd</sup> du., e. g. *cakr-áthur*, is due to the use of both *-thas* and *-tas* (cp. O.C.Sl. *pri-jetŭ* as 2<sup>nd</sup> and 3<sup>rd</sup> Person § 830 p. 367). The *a* of *-atur* appears to be that of the 3<sup>rd</sup> sing. and 2<sup>nd</sup> plural perfect.

§ 1039. Greek. Primary *-τον*: ἑσ-τόν φέρε-τον. Secondary *-ταῦν* and *-τον*: ἡσ-την ἐ-φερέ-την and ἡσ-τον ἐ-φερέ-τον. Cp. § 1033 p. 556.

§ 1040. Slavonic. *-te* and *-ta* are variants without any distinction: O.C.Sl. pres. and aor. *veze-te* and *-ta*, opt. *vezě-te* and *-ta*. *-te* may be derived from *\*-tes*, cp. Skr. *-tas*. Whether *-ta* originally belonged to the 3<sup>rd</sup> dual or was the ending of the 2<sup>nd</sup> dual is not clear. Perhaps *-ta* must be identified with Umbr. *-ta* in *etu-ta* 'eunto', see § 967 p. 508. As regards a third form *-tē* (used with a fem. subject), see § 1036 p. 557.

## MIDDLE ENDINGS.

### 1<sup>ST</sup> PERSON SINGULAR.

§ 1041. Protoethnic Indo-Germanic.

(1) Primary endings there appear to be two:

(a) *-mai* or *-māi* in unthematic stems: Gr. ἵστα-μαι *δίδο-μαι*, Lith. reflex. *vel-mė-s(i)* Pruss. *as-mai* 'sum'.

(b) *-ōi* in thematic stems (vgl. *-ō* in the active). Skr. thematic Conjunct. *kṛ-nāv-āi* (3<sup>rd</sup> sing. *kṛ-nāv-a-tē*). Norse Run. *haite* O.Icel. *heite* 'I bid, call'. The same ending in the long-vowel Conj.: Skr. *bhārāi* (cp. § 918 Rem. p. 466).

(2) The Secondary endings are quite obscure:

(a) Unthematic Stems. Skr. *á-dviṣ-i* doubtless for *-ā* (*á-dviṣ-i*: *dī-dviṣ-ē* = 1<sup>st</sup> pl. *-mahī* Gr. *-μεθα*: *-mahē*), but opt. *dviṣīy-ā* *bhārēy-a*. Gr. ἐ-δύ-μην δι-δοί-μην φεροί-μην (Dor. *-μᾶν*), recalling the Suffix of the 2<sup>nd</sup> sing. *-thēs* beside act. *-tha*.

(b) Thematic Stems. Skr. *á-bhar-ē*. Gr. ἐ-φερό-μην.

(3) *-ai* or *-āi* in the Perfect, is doubtless connected with

the *-a* of Skr. *dviṣīy-á* and the *-i* = *-ə* of Skr. *á-dviṣ-i* (cp. § 1054.3). Skr. *tutud-é*. Lat. *tutud-ī*. O.C.Sl. *věd-ě*.

### § 1042. Aryan.

(1) Primary ending. The *-ai* of the thematic Conj. is old: Skr. *mán-ai* Avest. Gath. *mēn-ai* beside indic. Skr. *á-ma-ta*, *s-Aor.* Skr. *mā-s-ai* Avest. Gath. *mēnagh-ai* beside indic. Skr. *á-mā-s-ta*, Skr. *kṛ-ṇāv-ai* beside indic. *kṛ-ṇu-tē*. Also *-ai* in the long-vowel Conj.: Skr. *bhārāi* Avest. *barāi*. So there was once indic. pres. *\*bharāi* (cp. active indic. Avest. *ufyā* Gr. *φῑω* like conj. Avest. *aəha* Gr. *ἔω* Lat. *erō* and conj. Skr. *ārcā* Gr. *ῥέω* § 976.2 p. 517), which was exchanged even in pr. Aryan for *\*bharaī* = Skr. *bhārē* Avest. *barē* following the *-ai* of the unthematic Indicative, and the analogy of *-sai* *-tai* etc., for the purpose, I would suggest, of distinguishing the conj. and indic. moods.

Instead of *-ai* in the conj. Avestic has sometimes *-anē*, a new formation based upon the active *-āni* and its termination imitating the middle *-t* as compared with act. *-ti* etc., e. g. *var'sanē* beside 3<sup>rd</sup> sing. *var's-a-itē* (*s-aorist* of *varz-* 'to work'), *yazānē* (beside *yazāi*) with 3<sup>rd</sup> sing. *yazā-itē* (from *yaz-* 'to offer').

Aryan *-ai* in the non-thematic indic. present: Skr. *bruv-ē* Avest. *mruyē* i. e. *mruv-ē* beside 3<sup>rd</sup> sing. *brū-tē* *mrū-itē*, Skr. *duh-ē*, Avest. *yn-ē* (✓ *ghen-* 'strike, slay'). This *-ai* I regard as borrowed from the perfect in place of orig. *\*-mai* (vice versa we have in Greek perf. *ἴδο-μαι* following pres. *ἴδο-μαι*), just as in the 3<sup>rd</sup> sing. Skr. *-ē* (§ 1055), and in the 3<sup>rd</sup> pl. Skr. *-rē* (§ 1078.1), came from the perfect to the non-thematic present.

(2) Secondary ending. Thematic Skr. *á-bharē* Avest. *a-barē* O.Pers. *a-takšaiy* (from *takš-* 'to shape, make all right').

Unthematic. In the Indicative Ar. *-i* for *-ə*: Skr. *á-duh-i* *á-kr-i*, Avest. Gath. *aoj-ī* (from *aoj-* 'to speak'), *s-aorist* Skr. *á-ruts-i*, O.Pers. *a-darš-iy* (from *dar-* 'to hold'). But in the Optative Ar. *-a*: Skr. *tanvīy-á* Avest. *tanuya* i. e. *tanviy-a* from *tun-* 'to stretch' (§ 940 p. 485), Skr. *bhārēy-a* Avest. Gath.

*vāuray-ā* (from *var-* 'to choose'), Avest. *mainya* for \**manyay-a* (I § 643 p. 482) = Skr. *mānyēy-a*.

(3) Pr. Ar. *-aḡ* in the perfect: Skr. *śu-śruv-ē* Avest. *susruyē* i. e. *su-sruv-ē* from *√kleṃ-* 'hear'.

§ 1043. Greek. Primary *-μαι*; on the analogy of *δίδομαι ἄρνυμαι* we get *φέρω-μαι φέρω-μαι* and perfect *δέδομαι τέτυγ-μαι*, etc.

Secondary (Dor.) *-μᾶν*: *ἐδιδό-μην ἐδεικνί-μην ἐείξα-μην τετύγ-μην τιθεί-μην φεροί-μην*.

§ 1044. Italic. Only the perfect Idg. *-aḡ* or *-oḡ* remains, but it loses its middle meaning: Lat. *tutud-ī*: Skr. *tutud-ē*, *ded-ī*: Skr. *dad-ē* (§ 867 p. 414). Perhaps we should explain *revertī* beside *revertor*, *assēnsī* beside *assentior* as due to the originally middle force of *-ī*.

§ 1045. Germanic. Idg. *-ði* (§ 1041. 1. b) in O.Icel. *heite heiti* 'I bid, call', beside Goth. *hāita*.

Remark. I cannot agree with Jellinek's conjectures in his *Beitr. zur Erklärung der germ. Flexion*, 1891, pp. 70 ff.

In Gothic the 3<sup>rd</sup> sing. *hāitada* does duty for the 1<sup>st</sup> sing. too; so also A.S. *hatte* is 3<sup>rd</sup> and 1<sup>st</sup> sing., cp. Goth. 3<sup>rd</sup> and 1<sup>st</sup> pl. *hāitanda*. On this use of the 3<sup>rd</sup> person for the 1<sup>st</sup> see Jellinek in the work just cited, pp. 103 ff.

§ 1046. Balto-Slavonic.

In Baltic Idg. *-mai* or *-māi* remains: Lith. reflex. *velmė-s(i)* (§ 511 p. 76), Pruss. *as-mai* 'I am'. Cp. § 983 p. 522.

The perfect *-aḡ* or *-oḡ* occurs in the single form O.C.Sl. *věd-ě* 'I know'.

## 2<sup>ND</sup> PERSON SINGULAR.

§ 1047. Protoethnic Indo-Germanic.

(1) Primary ending *-saḡ* or *-səḡ*. Skr. *bhāra-sē*, Gr. *φέρεαι φέρεη*, Goth. *batra-za*; thematic Conj. Skr. *maq-s-a-sē* Gr. *βιή-σ-ε-αι* (Theogn.), long-vowel Conj. Skr. *bhār-ā-sē* Gr. *φέρηαι φέρεη*. Skr. *da-t-sē dha-t-sē*, Gr. *δί-δο-σαι τί-θε-σαι*, Lith. *dāsi desė-s* O.C.Sl. *dasi*.

The same ending in the Perfect: Skr. *da-di-śē ri-rik-śē*, Gr. *δέ-δο-σαι λέ-λειπαι*.

(2) Secondary endings *-so* and *-thēs*, the latter connected with perf. act. *-tha* (§ 984.3 p. 523), and recalling Gr. *-μῶν* (§ 1041.2 p. 528). Originally it would seem that *-so* belonged only to thematic and *-thēs* only to unthematic stems.

(a) *-so*. Avest. *bara-ŋha*, Gr. *φέρσο φέρου ἐ-φέρτο ἐ-φέρου*, Lat. *sequere*. Possibly also Idg. *-se*, see § 1082.1.

(b) *-thēs*. Skr. *á-di-thās*, Gr. *ἐ-δό-θης*. *s*-Aor. Skr. *á-śramiṣ-thās* from *śram-* 'to grow tired' Gr. *ἐ-κρεμάσθης* from *κρέμα-μαι* 'I hang'. O.Ir. *cluín-te* 'exaudi'.

§ 1048. Aryan. On *-sya* in the imperative see § 968 p. 510.

(1) Primary ending, pr. Ar. *-saj*. Skr. *bhāra-sē* Avest. *bara-ŋhē*. Conj. Skr. *pychā-sē* Avest. *per'sā-ŋhē*; on *-sai* in the Skr. conjunctive, see § 922 p. 470. Skr. *brā-ṣē ky-ṇu-ṣē*, Avest. *raosē* beside 3<sup>rd</sup> sing. injunct. Gath. *raostā* (from *rud-* 'to grow'). Perfect Skr. *dadi-ṣē*.

(2) In the Secondary endings Sanskrit and Avestic do not go together; the former has only pr. Ar. *-thās*, the latter only pr. Ar. *-sa*. Skr. *á-ky-thās á-dhat-thās á-dhūnu-thās janiṣ-thās*, opt. *vāyrdhī-thās bhārē-thās*, pret. *á-bhara-thās*. Avest. *a-yasa-ŋha* (cp. Skr. *á-yacha-thās*), Gathic *aoyēā* beside 3<sup>rd</sup> sing. *aog'dā* (I § 482 p. 356), *dā-ŋha* (but Skr. *á-dhi-thās*), opt. *daiḍī-ša baraē-ša* (but Skr. *dadhī-thās bhārē-thās*).

§ 1049. Greek.

(1) Primary ending *-σαι*. ἦσαι 'thou sittest' for \*ἦσ-σαι (§ 494 p. 54), *δίδο-σαι δάμ-να-σαι*. *φέρσαι φέρη,*<sup>1)</sup> conj. *φέρηαι φέρη*. Perf. *γέγραπαι δέδο-σαι μέμνη-σαι*. That the 2<sup>nd</sup> sing. imper. of the *s*-Aorist, as *λέξαι*, comes in here, we saw in § 910 Rem. p. 460, § 969.2 p. 511.

(2) Of the two secondary endings, *-θης* holds its ground in the Present of Classes I and X and in the *s*-Aorist, as *ἐ-δό-θης* = Skr. *á-di-thās* (3<sup>rd</sup> sing. *ē-do-ro* = Skr. *á-di-ta*) *ἐ-κτά-θης* = Skr. *á-kṣa-thās* (3<sup>rd</sup> sing. *ē-kṣa-ro* = Skr. *á-kṣa-ta*), *ἐ-βλή-θης*

1) On the supposed middle forms in *-ει*, see Meisterhans Gramm. d. att. Inschr.<sup>2</sup> 131, the Author, Gr. Gr.<sup>3</sup> p. 147.

(3<sup>rd</sup> sing. ἔβλη-το), ἐ-μείχθης (3<sup>rd</sup> sing. ἔ-μεικτο for \*ἔ-μεικ-σ-το. On these forms is founded the whole "Weak" passive aorist ἐ-δόθη-ν etc. See § 589 pp. 130 f.

The only suffix which remained in living use was -σ; and this, as in Avestic, spread to unthematic stems. ἐ-φέρε-ο ἐ-φέρου, injunct. imper. φέρε-ο φέρου. ἔ-θρε-ο ἔθου (beside ἐ-τέ-θης), injunct. imper. θρέ-ο θού, ἦσο for \*ἦσ-σο, ἐ-δίδο-σο, ἐ-γέγραψο ἐ-δέδο-σο, ἐ-δεῖξα-ο (ἰδεῖξω Dor. ἐδεῖξα), opt. θεί-ο φέροι-ο.

The σ of -σαι and -σο of course dropt in pr. Greek after vowels (I § 564 p. 420 f.). In Attic on the analogy of forms such as γέγραψαι ἐγέγραψο, the σ was restored in the perfect, pluperfect, and unthematic present and imperfect, with a very few exceptions of which one is ἐδύνω: δέδοσαι δίδουσι ἐδέδωσο ἐδίδωσο ἴστασαι etc. Homer has still the unrestored forms, βέβληαι plpf. ἔσσο διζῆαι ἐμάρναο imper. παρ-ίσταο, side by side with δύνουσαι παρ-ίστασαι imper. ἴστασο. The aorist everywhere kept clear of this tendency: Att. ἔθου ἐδείξω.

In later times, the vulgar dialect used -σαι with thematic stems as well, e. g. in the N.Test. πίσειαι.

§ 1050. Italic. Latin keeps -so in the form -re (I § 81 p. 73): — *seque-re*: Gr. ἔπε-ο, *rē-re vidē-re fabulā-re*, conj. *sequā-re*.

Side by side with -re there is a variant -ris, found everywhere except in the imperative; e. g. *sequeris*. The reason for this formation, which is analogical, is that *agis* and *age* were associated as being both second person. In the older language, -re is still commoner than the other.

As regards *sequere sequeris* the student may further compare the remarks in § 1082 on Osc. *vinciter*.

Inscriptions also have -rus, as *spatiārus ūlārus*. I offer the following conjecture as to this ending. We may suppose that at the time when \**spatiā-so* was the form, a suffix \*-so-r arose answering to \*-to-r -tur in the 3<sup>rd</sup> singular,<sup>1)</sup> and that

1) \*-so-r \*-rur beside \*-so -re like O.Ir. -the-r beside -the (§ 1051).

\*-*rur* changed to -*rus* following -*ris*. This I think more probable than supposing that -*ris* changed to -*rus* on the analogy of -*ur* and -*tur*. Compare further p. 577 footnote.

§ 1051. Keltic. Irish retains Idg. -*thēs*.

-*the* for \*-*thēs* in the injunctive with imperative function, as *cluinn-te* 'exaudi'; this is found almost exclusively with verbs which are altogether or mostly deponent in flexion. See § 909 p. 458.

-*ther*, made up of -*the* + the deponent suffix -*r*, appears in the conjugation of deponents; e. g. pres. indic. -*sechther* 'sequeris' conj. -*sechther* 'sequeris'. In the s-aorist \*-*s-thēs* became -*sse*, and with -*r* -*sser*; as *ro-sudigser* from *sudigim* 'pono', like Skr. *janiṣ-ṭhas*.

§ 1052. Germanic. Here only -*saī* can be traced, Goth. -*za* (cp. III § 263 Rem. p. 165 f., Hirt, Idg. Forsch. I 217): *salbō-za* cp. Gr. perf. *τε-τίμη-σαι* Lat. injunct. pres. *amā-re*; *baīra-za* (*a* as the thematic vowel, as in 3<sup>rd</sup> sing. *baīra-da*, comes from the plural *baīrandā* in all probability): cp. Gr. *πέπε-αι*.

The ending -*zau* in opt. *baīrdi-zau* is, like -*dau* in the 3<sup>rd</sup> sing. and -*ndau* in 3<sup>rd</sup> plural, obscure. Compare imper. *at-steigadau liugandau*, § 970 p. 511.

§ 1053. Balto-Slavonic. Here also the only suffix is -*saī*, with active meaning.

In Lithuanian, it occurs with unthematic verbs, as *desē(-s)* for \**det-sē*: Skr. *dhatsē*; Pruss. *seggē-sai* 'thou doest'. See § 991 p. 528.

In Old Church Slavonic, also with verbs in -*mi*, as *dasi* 'givest' for \**dō-t-saī*: Skr. *datsē*. See *ibid*.

### 3<sup>RD</sup> PERSON SINGULAR.

§ 1054. Proethnic Indo-Germanic.

(1) Primary ending -*taī* or -*tāī*. Skr. *ās-tē* Gr. *ἦσ-ται*. Skr. *ṛ-ṇu-tē* Gr. *ῥρ-vv-ται*. Gr. *ἄη-ται* Lesb. *ποίη-ται* *τίμω-ται* Goth. *salbō-da*. Skr. *bhāra-tē* Gr. *πέπε-ται* Goth. *baīra-da*.

Thematic Conjunct.: Skr. *kar-a-tē mā-s-a-tē* Gr. *φθί-ε-ται ἀμείψ-ε-ται*. Long-vowel Conjunct.: Skr. *manyā-tē* Gr. *μαίνη-ται*.

(2) Secondary ending *-to*. Skr. *á-di-ta* Gr. *ἔ-δο-το* Lat. *da-tu-r*. Skr. *á-stō-ṣ-ṭa* Gr. *ἔμεικτο* for *\*ἔ-μεικ-σ-το*. Opt. Skr. *dadhī-tá* Gr. *τιθεῖ-το* Lat. *du-tu-r*, Skr. *bhárē-ta* Gr. *φέροι-το*. Skr. *á-bhara-ta* Gr. *ἔ-φίρε-το* Lat. *agi-tu-r*. Conj. Lat. *ferā-tu-r* O.Ir. *do-berthar*.

*-to* also in Venetian: *zo-to* 'ἔδοτο', *zonas-to* 'ἐδωρήσατο, donavit'. See p. 53 footnote 2. In Armenian Bugge (Idg. Forsch. I 440) sees *-to* in the *-v* of the 3<sup>rd</sup> sing. aor. II mid., as *cnav* 'natus est' for *\*genā-to*, cp. 3<sup>rd</sup> pl. *cna-n* § 1066. I also conjecture *-to* in such forms as Lith. *rims-ta*, see footnote to p. 216.

On the strength of Osc. *-ter* beside Lat. *-tur* = *-to + r*, e. g. *vincter* 'vincitur', we should perhaps assume another Idg. form *-te* beside *-to* (and similarly in the 3<sup>rd</sup> pl. *-nte* beside *-nto*), see § 1082.

(3) *-ai* or *-ei* in the Perfect: Skr. *ca-kr-é da-dh-é*.

In § 1041.3 p. 560 I said that *-ē* in Skr. 1<sup>st</sup> sing. *dī-dviṣ-ē* is doubtless connected with *-i* = *-ə* in the 1<sup>st</sup> sing. *á-dviṣ-i*. If so, we must connect *-ē* in 3<sup>rd</sup> sing. *didviṣ-é* with *-i* in 3<sup>rd</sup> sing. aor. mid. pass., as ai. *á-vāc-i*; all the more because the root-vowel so strikingly recalls the Skr. 3<sup>rd</sup> sing. perf. act. (*u-vāc-a*). Compare § 905 p. 453.

§ 1055. Aryan. As regards *-am* and *-tām* in the Imperative, see § 968.2 p. 510.

(1) Primary ending Ar. *-tai*. Skr. *vás-tē* Avest. *vas-tē* (from *vas-* 'to clothe oneself'), Skr. *dhattē* Avest. Gath. *dazdē* (I § 482 Rem. 1 p. 356). Skr. *bhára-tē* Avest. *baraitē* O.Pers. *gauba-taiy* 'is called'. Conj. Skr. *yam-a-tē* Avest. *yamaitē* (from *yam-* 'cohibere'), Skr. *yáj-ā-tē* Avest. *yazaitē* O.Pers. *gaubā-taiy*; on *-tāi* in the Skr. Conj. see § 922 p. 470.

(2) Secondary ending Ar. *-ta*. Skr. *á-bra-ta* Avest. Gath. *mrū-tā*, Skr. *á-ha-ta* O.Pers. *a-ja-tā*. s-Aor. Skr. *á-praṣṭa* Avest. Gath. *fraṣṭā* from  $\sqrt{\text{prek-}}$  (§ 814 p. 352). Skr. *á-bhara-ta* Avest. *bara-ta* O.Pers. *a-naya-tā* 'was led'.

Opt. ai. *bruvī-tá* Avest. Gath. *mrvi-tā* Skr. *dadhi-tá* Avest. *daiṣti-ta*, Skr. *bhárē-ta* Avest. *baraē-ta*.

(3) Perfect Ar. *-aḫ*. Skr. *da-dhr-ē* Avest. Gath. *dā-dr-ē*, Skr. *da-dh-ē* Avest. *daiḍ-ē*. The *-i* of Skr. *á-vāc-i* Avest. Gath. *a-vāc-i* may be regarded as in some degree the secondary ending of this *-aḫ*; see § 1054. 3.

It is not uncommon to find Ar. *-taḫ* and *-aḫ* interchanging, in consequence of the close connexion between Present and Perfect. Thus on the one hand we have Skr. *īṣ-ṭē* instead of *īṣ-ē* (Avest. *is-ē*, Goth. act. *dih*, § 848. 1 p. 391).<sup>1)</sup> On the other hand, Skr. *bruv-ē* Avest. *mruyē* i. e. *mruvē* instead of *mrū-tē* *mrūitē*, Skr. *śṛuv-ē* instead of *śṛnu-tē*. There is the same confusion in the 3<sup>rd</sup> pl. (§ 1078. 1). Compare also act. *nō-nav-a* beside *nō-navi-ti* § 850 p. 398. There is nothing to prevent forms like Skr. *bruv-ē* from being called an unreduplicated perfect.

§ 1056. Greek. On the imper. *-σθω* see § 966 p. 506 f.

(1) Primary ending *-ται* (Boeot. *-τη* Thess. *-ται* I § 96 p. 90). *ἴστα-ται φέρε-ται*, conj. *ἀμείψε-ται φέρη-ται*. Arcad. *-τοι* instead of *-ται*, but (notwithstanding O. Hoffmann, Die griech. Dial. i 180 f.) this comes from the analogy of *-το*.

Even in pr. Greek perf. *δέδο-ται πέπυσται* following the present (cp. Skr. *īṣ-ṭē* instead of *īṣ-ē* § 1055. 3), just as *δέδο-μαι* follows *ἰδο-μαι* (§ 1043 p. 560).

(2) Secondary ending *-το* (Cypr. *-rv* I § 80 p. 71): *ἴστα-το ἐ-φέρε-το*, opt. *τιθεῖ-το φέροι-το*.

§ 1057. Italic. Here we have *-to* with *-r*. Lat. *da-tu-r*: Gr. *δό-το*. *sequi-tu-r*: Gr. *ἐπε-το*. As to Osc. *-ter* see § 1054. 2 p. 564, § 1082.

§ 1058.<sup>2)</sup> Keltic. Probably only *-to*.

First in the 3<sup>rd</sup> sing. of the *t*-preterite, as O.Ir. *as-bert*

1) Compare the change of Upper-Germ. *er weiss* to *er weisst* and of O.Fris. *āch* 'he has' (= got. *dih*) to *ācht*.

2) Whoever assumes with Zimmer that the 3<sup>rd</sup> pl. act. *berit* represents both *\*beronti* and mid. *\*berontai* (see § 1024 p. 552) may also regard 3<sup>rd</sup> sing. *sechidir* and 3<sup>rd</sup> pl. *sechitir* as representing *-tai+r* and *-ntai+r*.



dixit', which is followed by 1<sup>st</sup> sing. *-burt* etc. after *-t* became part of the stem; see § 506 pp. 72 f.

Next, in the middle ending *-thar* for *-to+r*, as conj. *doberthar*: Lat. *ferā-tur*.

§ 1059. Germanic. Only *-tai* remains. Goth. *háita-da* A.S. *hätte* for *\*haita-ðai*, Goth. *salbō-da*. See § 1045 p. 560. *-a-* is the thematic vowel, as in the 2<sup>nd</sup> sing. *háita-za* § 1052 p. 563.

The ending *-dau* in Goth. opt. *bairái-dau* (also used as 1<sup>st</sup> sing.) is obscure. Compare *bairái-zau*, loc. cit.

#### 1<sup>ST</sup> PERSON PLURAL.

§ 1060. Proethnic Indo-Germanic. We may suppose that *-medhai* or *-medhəi* = Skr. *-mahē* is the Primary, and *medhə* = Skr. *-mahi* Gr. *-μεθα* the Secondary ending, e. g. pres. Skr. *bhārā-mahē* pret. Skr. *á-bharā-mahi* Gr. *ἐ-φερό-μεθα*. Compare § 973 p. 515 f.

Goth. *bairanda* is doubtless 3<sup>rd</sup> pl. and not for *\*bira-mda* *\*-midai* (§ 1071).

As to *-mmedhai* (Avest. *hišc-amaiðē*), answering to act. *-mmes*, see § 1001 p. 535 f.

§ 1061. Aryan. Skr. *-mahē -mahi* with *h = dh* is to be explained like the imper. ending *-hi* beside *-dhi*, see § 960 p. 503.

(1) Primary ending Skr. *-mahē* Avest. *-maiðē*. Skr. *bhārā-mahē* Avest. *barā-maiðē*. Conj. Skr. *saniṣā-mahē* Avest. *cinapā-maiðē* (beside *cinas-ti* 'he teaches' § 626 p. 163); on Skr. conj. forms like *yājāmahāi* see § 922 p. 470.

The same ending in the Perfect: Skr. *mumuc-māhē*.

(2) Secondary ending Skr. *-mahi* Avest. Gath. *-maiðī*. Skr. *á-yuj-mahi*, s-Aor. Skr. *á-ga-s-mahi* (from *gam-* 'to go') Avest. *a-mēhmaidī* (from *man-* 'to think', § 815 p. 353). Opt. Skr. *bhārē-mahi* Avest. *barōi-maiðī*.

In late Avestic *-maiðē* is also used as secondary (just the opposite in Greek, § 1062), e. g. opt. *barōi-maiðē*.

§ 1062. Greek. Only *-μεθα*, the secondary ending, is kept, and used for both primary and perfect suffix as well as secondary. *ὀρ-νί-μεθα φερό-μεθα, ἐ-φερό-μεθα, φεροί-μεθα*, perf. *πεπύσμεθα*.

Homer. *-μεσθαι* with *σ* by analogy of *-σθε -σθον -σθην*.

Remark. V. Henry (*Mém. Soc. Ling.* vi 73 f.) thinks that Greek once had in the active *φέρουμε*: \**ιφερομε*, and at this period the type *φερόμεσ-θα* was produced on the analogy of *ιφερούμε-θα*; after that *-μεσθα* was employed as secondary as well as primary.

Aeol. *-μεθεν*, only known through the grammarians, appears to be modelled upon *-μεν* (*-μεθεν*: *-μεν* = *-σθε*: *-τε*). Compare 3<sup>rd</sup> pl. Thess. *-νθει-ν* § 1068.

## 2<sup>ND</sup> PERSON PLURAL.

§ 1063. Proethnic Indo-Germanic. All that can be fairly inferred from Ar. *-dhyaī* (primary) *-dhvam* (secondary) and Gr. *-σθε* (both) is that the original ending contained *dh*. It is phonetically possible to derive Gr. *-σθε* from \**-σθφε*. The original ending of the suffix may perhaps be that shewn by Aryan. It is possible that Gr. *-σθον* was orig. 2<sup>nd</sup> plural (*-σθον* = Skr. *-dhvam*), and turned into a dual because of the dual meaning of *φέρετον*; after which *-σθε* was made for the plural to match *-τε*.

Remark. The *σ* of *-σθε* is the most obscure part of this suffix. Three explanations are possible.

(1) The suffix originally began with *-zdh-*, which became Gr. *-σθ-*. In Aryan *z* dropt between consonants, and the type thus produced became general.

(2) It orig. began with *-dh-*. Then Gr. *ῥσ-θε πέπυσ-θε* come straight from it. In mentally analysing these forms, *σ* was conceived to be part of the suffix; whence *φέρε-σθε* etc. On this supposition it remains doubtful whether such forms as *ἔπαρθε ἔσταλθε περύλαχθε* still have the orig. suffix, without the intrusive *σ*, or whether they once had *σ* and it disappeared as it regularly would.

(3) There was a double suffix, with initial *-zdh-* or *-dh-*; and each of the two types was preferred by certain languages.

Compare Bartholomae, *Rhein. Mus.* XLV 153.

§ 1064. Aryan. On Skr. *-dhvad* imper., see § 965 p. 506.

(1) Primary ending Ar. *-dhyaī -dhuyai*: Skr. *-dhvē*, also *-dhuvē* in Vedic, Avest. *-duyē* i. e. *-duvē*. Skr. *anag-dhvē*

(from *anák-ti* 'he smears, anoints') Avest. Gath. *mer'rag'-duyē* (from *marc-* 'to destroy', § 626 p. 162). Conjunctive Skr. *kāmāyā-dhvē*; as regards *-dhvāi* in the conj., see § 922 p. 470.

The same ending in the Perfect: *bubudhi-dhvē*.

(2) Secondary ending. Ar. *-dhyam -dhuyam*: Skr. *-dhvam*, also *-dhuvam* in Vedic, Avest. *-āwem -dūm* (I § 159 p. 142). Skr. *á-bhara-dhvam* Avest. *bara-āwem*. Avest. *s-aorist* Gath. *brā-z-dūm* from *trā-* 'to push through' (§ 813 p. 351).

§ 1065. Greek. Always *-σθε*, see § 1063. *φέρεσθε ἡσθε* *ἐ-φέρε-σθε* *φέρου-σθε*. Perfect *πέπυσθε*.

Perf. *πέφανθε* beside 1<sup>st</sup> sing. *πέφασμαι* 3<sup>rd</sup> sing. *πέφανται* is doubtless a transformation of *\*πέφασθε* on the lines of *ἔσπαρθε* beside *ἔσπαρθαι*; see § 862 p. 411.

### 3<sup>RD</sup> PERSON PLURAL.

§ 1066. Proethnic Indo-Germanic.

(1) After consonants *-ntai* or *-ntāi* and *-nto*.

(a) Primary ending *-ntai* or *-ntāi*. Skr. *ds-atē* Gr. Hom. *ἦ-αται*, Skr. *dá-dh-atē pu-n-atē ta-nv-atē*.

(b) Secondary ending *-nto*. Skr. *ds-ata* Gr. Hom. *ἦ-ατο*. Skr. *á-kṛ-ṇv-ata*, *s-Aor. á-dṛkṣ-ata*. Opt. Gr. *γερσέ-ατο*.

(2) After sonants *-ntai* or *-ntāi* and *-nto*.

(a) Primary ending *-ntai* or *-ntāi*. Skr. *bhára-ntē* Gr. *φέρο-νται* Goth. *baira-nda*. Thematic Conj. Skr. *mq-s-a-ntē* Gr. Hom. *ἐπ-εντένο-νται* (*ἐπ-εντένω* 'I arrange'). Long-vowel Conjunctive Avest. *hacā-ntē* Gr. *ἔνω-νται*. Gr. *ἄλζη-νται* Lesb. *προ-νόη-νται* *τίμω-νται* Goth. *salbō-nda*.

(b) Secondary ending *-nto*. Skr. *á-bhara-nta* Gr. *ἐ-φέρο-ντο* Lat. *feruntu-r* O.Ir. *do-bertar*. Conj. Lat. *fera-ntu-r* O.Ir. *do-bertar*. Gr. *ἔμ-πλη-ντο* Lat. *im-ple-ntu-r* *planta-ntu-r*.

*-nto* is conjectured by Bugge (Idg. Forsch. i 440) in the *-n* of the Armen. 3<sup>rd</sup> pl. aor. II mid., as *cna-n* 'nati sunt' for *\*gēnā-nto*.

On account of Oscan forms of the 3<sup>rd</sup> plural like *karanter* 'pascuntur' beside Lat. *-ntur* = *-nto+r*, we should perhaps

assume an Idg. form *-nte -nte* beside *-nto -nto* (similarly in the 3<sup>rd</sup> sing. *-te* beside *-to*), see § 1082.

(3) Perfect. What connexion there is between the Aryan forms, as Skr. *du-duh-rē ja-gm-i-rē*, and O.Ir. *do-mēn-atar* (Gr. *τεράφ-αται*) is still a riddle. See §§ 1076 ff.

§ 1067. Aryan. On the Imperative in *-atām -ntām* see § 968 p. 510.

(1) After sonants Ar. *-atai -ata*.

(a) Primary ending *-atai*. Skr. *vās-atē, indh-atē indh-ātē*, Avest. *mer<sup>nc</sup>-aitē*.

(b) Secondary ending *-ata*. Skr. *á-gm-ata á-tanv-ata*, Avest. Gath. *dar's-atā* (✓*derk-*).

In Avestic *-aitē -ata* as a rule gave way to *-antē -anta*, which mark the plural number better; cp. act. *daṣ-enti* as contrasted with Skr. *dádih-ati* § 1018. 1. b p. 545. E. g. *ārahantē dadentē ver<sup>nc</sup>nvaintē* (Skr. *ās-atē dádih-atē vṛnv-ātē*), *mravanta* (3<sup>rd</sup> sing. *mrāo-tā mrū-ta*), opt. *barayanta*.

As regards O.Pers. *ahatā* 'erant' it is impossible to say whether it ought to be spelt with a nasal or not (I § 197 Rem. p. 166).

(2) After sonants Ar. *-ntai -nta*.

(a) Primary ending *-ntai*. Skr. *bhāra-ntē*, Avest. *bara-ntē*. Short-vowel Conjunctive Skr. *nā-s-a-ntē* (from *nam-* 'to bend, bow oneself'), long-vowel Avest. *yazd-ntē*. On *-ntai* in the Skr. Conjunctive see § 922 p. 470.

(b) Secondary ending *-nta*. Skr. *á-bhara-nta*, Avest. *yaze-nta* O.Pers. *a-baratā* (read *abarantā*).

(3) In the Perfect we have an *r*-ending, Skr. *-rē* Avest. *-rē*, see § 1078. 1. Observe that in Sanskrit this ending crept into the Present like the *-ē* of the 3<sup>rd</sup> sing. (§ 1055. 3 p. 565). e. g. *duh-rē sunv-i-rē*.

§ 1068. Greek. On imper. *-σθω -σθων -σθωσαν* see § 966 p. 506 f.

(1) After consonants *-αται -ατο*.

(a) Primary ending *-αται*. Hom. *ῆ-αται* for *\*ῆσ-αται*,

κέ-αται for \*κελ-αται (variant κείαται with κει- following κεί-μαι etc., see I § 130 p. 117 f.), εἰρύ-αται.

(b) Secondary ending -ατο. Hom. ἦ-ατο κεί-ατο εἰρύ-ατο. Opt. Hom. and elsewhere γενό-ατο ἐπι-φρασσά-ατο ἐπι-σταί-ατο, whose diphthongs οι and αι are to be explained like κεί-αται (a), δαινό-ατο = -νυι-ατο (§ 944 p. 487).

-αται -ατο are special favourites in the Perfect system, where they occur even in Attic prose; e. g. τετεύχ-αται γεγράφ-αται ἐ-τετάχ-ατο (cp. § 898 p. 446).

Instead of \*τιθ-αται \*διδ-αται (Skr. dá-dh-atē) we have τίθε-νται δίδο-νται (2), as act. τίθει-ντι instead of \*τιθ-αται (§ 1020. 1. b p. 547).

(2) After sonants -νται -ντο.

(a) Primary ending -νται. φέρο-νται. Conj. φέρω-νται. δίζη-νται Lesb. προ-νόη-νται.

(b) Secondary ending -ντο. ἰ-φέρο-ντο. πλη-ντο = \*πλᾶν-το pres. πλάζω, ἔμ-πλη-ντο from plē- 'fill'.

Of the same kind are perf. μέμνη-νται δεδούλω-νται ἰ-μέμνη-ντο.

Wherever a long vowel precedes -νται -ντο it was previously short, as it should be (I § 611 p. 461). Compare opt. -πλήτο μεμνήμην § 944 p. 488. With φέρωνται cp. act. φέροντι § 923 p. 471.

Both -αται -ατο and -νται -ντο overstep their proper boundaries in one or more dialects. In Ionic the former pair are applied to stems in α, ε, or ο; as Hom. βεβλή-αται βεβλή-ατο instead of βέβλη-νται βέβλη-ντο, late Ion. πιπονέαται (for -ηαται) and τιθέ-αται διδό-αται, cp. act. τιθέ-ασι (§ 1021. 4 p. 549). On the other hand, -νται -ντο are added to stems in ι and υ in Attic and elsewhere, sometimes in Ionic itself; e. g. κεί-νται ἔκει-ντο λύ-ντο ἄγνυ-νται (should be \*ἀγνυ-αται, cp. Skr. aśnuv-atē) εἰρυν-το, opt. γίνοι-ντο τιθεῖ-ντο, with which compare 1<sup>st</sup> sing. ἔφϋ-ν (§ 979. 3 p. 520) and opt. 1<sup>st</sup> sing. φέροι-ν (*ibid.*) and 3<sup>rd</sup> pl. φέροι-ν (§ 1020. 1. b p. 547). Further, ἦνται ἦντο beside ἦαται ἦατο, since ἦμαι ἦμεθα (for \*ἦσ-μαι \*ἦσ-μεθα) were regarded as similar in structure to ἄη-μαι etc.

Boeotian and Thessalian have  $\vartheta$  in place of  $\tau$  in the 3<sup>rd</sup> plural endings, as Boeot.  $\acute{\epsilon}\sigma\tau\rho\sigma\tau\epsilon\nu\acute{\alpha}\vartheta\eta$  (= Ion.  $\acute{\epsilon}\sigma\tau\rho\alpha\tau\acute{\epsilon}\nu\alpha\tau\alpha\iota$ )  $\acute{\epsilon}\beta\acute{\alpha}\lambda\omicron\nu\vartheta\omicron$  Thess.  $\acute{\epsilon}\gamma\acute{\epsilon}\nu\omicron\nu\vartheta\omicron$ ; and Boeotian has  $\vartheta$  in the active endings too,  $\kappa\alpha\lambda\acute{\epsilon}\omicron\nu\vartheta\iota$   $\delta\iota\delta\acute{\omicron}\alpha\nu\vartheta\iota$ . It may be suggested that  $\vartheta$  came in from the middle endings  $-\mu\epsilon\vartheta\alpha$  and  $-\sigma\vartheta\epsilon$ , and in Boeotian had spread from the 3<sup>rd</sup> pl. middle to the 3<sup>rd</sup> pl. active.

In Thessalian we get  $-\nu\vartheta\epsilon\iota-\nu$  as a primary ending, in which  $-\nu$  probably came from the active; cp. § 1062 p. 567 on  $-\mu\epsilon\vartheta\epsilon\nu$ . Example:  $\acute{\epsilon}\varphi\alpha\nu\gamma\rho\acute{\epsilon}\nu\vartheta\epsilon\iota\nu$ .

§ 1069. Italic. Here we have  $-nto + -r$ . Lat. *feru-ntur ama-ntur*, Umbr. *ema-ntur* 'emantur'. On Osc. *kara-nter* see § 1066. 2. *b* p. 568.

§ 1070.<sup>1)</sup> Keltic. Here too we have  $-nto + r$ , as O.Ir. *do-bertar* 'dantur': Lat. *feru-ntur*. Beside this  $-nto$  without  $-r$  is possibly contained in *do-berat* 'dant', see § 1024 p. 552.

§ 1071. Germanic.  $-ntai$  or  $-nt\ddot{a}i$  in Goth. *batra-nda salbō-nda*, used for both 1<sup>st</sup> and 2<sup>nd</sup> plural (cp. § 1060 p. 566).

An obscure form is  $-ndau$  in the opt. *batrái-ndau* (also used for both 1<sup>st</sup> and 2<sup>nd</sup> plural); cp. § 1052 p. 563.

#### PERSONS OF THE DUAL MIDDLE.

§ 1072. 1<sup>st</sup> Person. Aryan alone has any special suffix; Skr. prim.  $-vah\bar{e}$  sec.  $-vahi$ , which if we judge by  $-mah\bar{e}$   $-mahi$  will be derived from  $*-\mu\acute{e}dha\bar{i}$  or  $*-\mu\acute{e}dh\bar{a}\bar{i}$  and  $*-\mu\acute{e}dh\bar{a}$ . E. g. *bhára-vahē* opt. *bhárē-vahi*; on  $-vahai$  in Conjunctive forms like *sacāvahai* see § 922 p. 470.

Greek.  $-\mu\epsilon\vartheta\omicron\nu$ , only found in rare instances and questionable at that, is doubtless a transformation of  $-\mu\epsilon\vartheta\alpha$  made to match the ending of  $-\sigma\vartheta\omicron\nu$ .

§ 1073. 2<sup>nd</sup> and 3<sup>rd</sup> Person. Here there is hardly anything to do but to present the facts. Aryan alone shows suffixes that can have any claim to be regarded as original.

§ 1074. Aryan. Skr. primary 2<sup>nd</sup> dual  $-athē$  3<sup>rd</sup> dual  $-atē$ ,

1) See footnote 2 to § 1058 p. 565, above.

secondary 2<sup>nd</sup> dual *-āthām* 3<sup>rd</sup> dual *-ātām* in unthematic stems. Indic. pres. *diviṣ-āthē -ātē*, imperf. *á-diviṣ-āthām á-diviṣ-ātām*. It has the primary endings in the Perfect, *cakr-āthē -ātē*. In Avestic the same stems have the secondary 3<sup>rd</sup> dual *-ātem* = pr. Ar. *\*-ātam*: *a-sru-ātem* von *sru-* 'hear'. In Vedic are other secondary endings, *-īthām -ītām*: 2<sup>nd</sup> dual injunct. aor. *trā-s -īthām* 3<sup>rd</sup> dual indic. aor. *á-dh-ītām*.

Skr. primary 2<sup>nd</sup> dual *-ēthē* 3<sup>rd</sup> dual *-ētē*, secondary 2<sup>nd</sup> dual *-ēthām* 3<sup>rd</sup> dual *-ētām* in thematic stems. Indic. pres. *bhárēthē bhárētē*, imperf. *á-bharēthām á-bharētām*. On the Conjunctives *bhárāithē bhárāitē* see § 922 p. 470. In Avestic there is a 3<sup>rd</sup> dual indic. pres. *vaēnōipē*, answering to the form of the Skr. 2<sup>nd</sup> dual; but injunct. 3<sup>rd</sup> dual *jasātem*.

Rarely Skr. *-thē* etc. without any preceding vowel in the ending itself. Skr. 2<sup>nd</sup> dual indic. perf. *ci-ké-thē*, 3<sup>rd</sup> dual indic. pres. *patya-tē* conj. aor. *yam-a-tē*, 2<sup>nd</sup> dual injunct. *dī-dhī-thām*. Similarly Avest. 3<sup>rd</sup> dual indic. perf. *dazdē* = *\*dha-dh-tai*.

See further details in Bartholomae, Kuhn's Zeitschr. xxix 283 ff.; Jackson, Amer. Or. Soc. Proceed., Oct. 1889, p. CLXV.

§ 1076. Greek. Indic. pres. 2<sup>nd</sup> dual *φέρε-σθον* 3<sup>rd</sup> dual *φέρε-σθον*, imperf. 2<sup>nd</sup> dual *ἐ-φέρε-σθον* (*ἐ-φερέ-σθην*) 3<sup>rd</sup> dual *ἐ-φερέ-σθην* (*ἐ-φέρε-σθον*) answering to the active *φέρε-τον* etc., see § 1033 p. 556, § 1039 p. 558. Possibly *φέρε-σθον* was originally 2<sup>nd</sup> plural (§ 1063 p. 567), and caused *-σθων* to be made on the model of *-τῶν*.

#### ARYAN, ITALIC, AND KELTIC ENDINGS WITH R.<sup>1)</sup>

§ 1076. In this section we discuss those endings of the Aryan, Italic, and Keltic branches which consist of, or contain, the suffix *-r*.

Remark. It is not impossible, but certainly it is unlikely, that the *r* which we noticed in the 2<sup>nd</sup> and 3<sup>rd</sup> singular in Armenian has the same origin (§ 986 Rem. p. 524).

1) These have been more fully treated by Windisch and Zimmer in their essays cited on pages 512 and 513.

Italic and Keltic are very much alike in these endings. Aryan is quite different; and it has not yet been shewn which best represents the parent language, or how the present variation came about. Perhaps *r* was originally a perfect suffix; for the perfect has peculiar endings in other of its persons. But whether *r* properly belonged to the 3<sup>rd</sup> plural, or denoted an indefinite subject or subjects, such as *one says*, *one comes*, or what, it is at present quite impossible to say. Certain *r*-forms in both Italic and Keltic appear to belong to the separate history of those branches.

I shall not indulge in any speculations as to the earliest value of this *r*. The latest discussion may be seen in Johansson's paper, Bezz. Beitr. xviii 49.

§ 1077. Aryan shows it almost exclusively in the 3<sup>rd</sup> plural (exceptions are the 2<sup>nd</sup> and 3<sup>rd</sup> dual perf. act. in *-athur* *-atur* in Sanskrit).

The Active voice has it in the 3<sup>rd</sup> pl. perfect, aorist, and optative, with exception of the 2<sup>nd</sup> and 3<sup>rd</sup> dual perfect.

First as regards the usage in the 3<sup>rd</sup> plural. Here *-r* sometimes is the only personal suffix and sometimes it is combined with *s*. Tracing the forms back to proethnic Aryan, we get four:

(1) *-r* = Avest. *-r'*: opt. *hyā-r'* 'sint', a later re-formate with the strong opt. suffix *-yā-* (§ 1018. 2 p. 546).

(2) *-rr* (the form taken by *r* before sonants) = Skr. *-ur* Avest. *-ar'* (I § 290 p. 233): perf. Skr. *ās-úr* Avest. *ānōh-ar'*, aor. Skr. *á-dh-ur* Avest. Gath. *d-ar'*, opt. Skr. *sy-úr bhārēy-ur*. But Skr. *-ur* may be equated with Avest. *-er's* (4).

(3) *-rš* = Avest. *-r's*: opt. *daiṇyā-r's*, a new form like *hyā-r'* (1).

(4) *-rš* = Avest. *-er's*: perf. *cikōit-er's* (§ 850 p. 397, § 852 p. 402). This form may also be the origin of Skr. *-ur*, compare gen. abl. Skr. *matúr* with Avest. *ner's* III § 235 pp. 125 f.

Exceptionally Skr. *-ur* appears in the indic. present as well, as *duh-úr* 'they milk'. But this formation, 3<sup>rd</sup> pl. mid. *duh-rē* and



3<sup>rd</sup> sing. mid. *duh-ē*, may if you will be called an unreduplicated perfect. In any case *duh-ūr* does not justify our assuming that *r* originally belonged to the indic. present.

The combinations Skr. *-atur* Avest. *-atar*<sup>s</sup> in the 3<sup>rd</sup> dual, and Skr. *-athur* in the 2<sup>nd</sup> dual, are without doubt peculiar to Aryan; see § 1038 p. 557 f.

§ 1078. In the Middle and Passive *r* is found only with the 3<sup>rd</sup> plural, and only combined with other elements, added after it, which usually appear as middle and passive suffixes in other connexions.

(1) *-raī* in the 3<sup>rd</sup> pl. perf., and by analogy in the 3<sup>rd</sup> pl. present, is proethnic in Aryan. Skr. *du-duh-rē da-dh-rē*, pres. or unreduplicated perf. *duh-rē* (cp. *duh-ūr* § 1077); Skr. *śē-rē* Avest. *saē-rē sōi-rē* 'they lie' (cp. 3<sup>rd</sup> sing. *śāy-ē* beside *śē-tē*). In Sanskrit *-rē* is generally preceded by *-i* = Idg. *-ə*, regularly so in Vedic with a long stem-syllable (cp. § 844 p. 385), as *iś-i-rē ja-jñ-i-rē* (cp. Avest. *vaoz-i-rem* under 2.); so also pres. *śṛṇv-i-rē* (cp. 2<sup>nd</sup> sing. *śṛṇv-i-śē* § 853 p. 403). *-irē* became a new suffix and in classical Sanskrit was the only one used for the Perfect, as *duduh-irē cikriy-irē* (pres. *śay-irē* beside *śē-ratē*). By analogy of forms like *duduh-rē* and like *ja-jñ-irē* we have in Vedic *duduh-rirē jagybh-rirē*, and others.

In Avestic *-rē* passed into the *a*-Conjunctive: *āsha-rē* beside indic. *as-tē* 'sits'.

Ar. *-raī* seems to have the same relation to act. *-r* (*-r*) as *-ntaī* to *-nt*, 3<sup>rd</sup> sing. *-taī* to *-t* and the like.

(2) Further, *-ram* in the augmented preterite is pr. Aryan, as *ā-dṛś-ram a-ṣṛg-ram*, Avest. *vaoz-i-rem* (§ 844 p. 385, § 854 p. 403). *-ram* is usually compared with the middle ending of 2<sup>nd</sup> pl. *-dhvam*.

The following *r*- suffixes appear in Sanskrit only.

(3) *-ra* in augmented preterite: *ā-duh-ra*. *ā-duh-ra* : *duh-rē* = *ā-duh-ata* : *duh-atē* (*duh-ātē*).

(4) *-ratē* and *-rata*: pres. *duh-ratē śē-ratē*, opt. *mās-ī-rata bharē-rata*.

(5) Isolated: *-ranta* in *ā-va-ṽt-ranta*.

(6) *-rām* and (7) *-ratām* in the Imperative: *duh-rām* and *duh-ratām*. Cp. *duh-ātām* § 968.2 p. 510. Lastly

(8) *-ran* in the augmented preterite, as *a-va-ṛt-ran* *á-ca-kr-i-ran* *á-dṛś-ran* *á-śē-ran*, and in the Optative, as *da-dī-ran* *bhárē-ran*. That the ending *-an* is the same as *-an* in the active (for *\*-ant*) I cannot regard as proved at all. It may be some element not found elsewhere as a personal suffix, of like character with *-s* in the Avestic active ending *-r's*.

§ 1079. As regards the *r*-suffixes in Italic and Keltic, the first remark to be made is that not one of them can be confidently held to have originally had an active meaning. All of them may be explained as originally deponent or passive (cp. § 1081 *sub fin.*).

The Latin suffixes of the 3<sup>rd</sup> pl. indic. perf. *-erunt* *-ērunt* *-ere* (with *dedrot* etc.) are at least in some degree akin to the Aryan *r*-forms. This has been already pointed out as likely in § 1023 p. 551. But there is no need to believe that the Latin forms have any such basis as the Aryan active forms of the 3<sup>rd</sup> plural perfect. Since the 1<sup>st</sup> sing. *tutud-ī* was properly middle, the 3<sup>rd</sup> plural may be derived from a middle type like that of Skr. *-rē -ra*.

The remaining *r*-forms in Italic and Keltic fall into two groups.

§ 1080. (I) Forms in Umbro-Samnitic and in Keltic where *r* appears to be the only personal suffix.

The Umbro-Samnitic forms seem best translated by aid of the indefinite *one* or *they*. Umbr. *pihafei(r)* 'let them have appeased', Osc. *sakrafir* (with *últiumam* for object) 'let them have consecrated' (§ 874 p. 422, § 926.3 p. 473). Umbr. *ferar* 'let one carry', *ier* 'one will go' possibly for *\*ier-er* i. e. *\*e(ī)-es-er* (§ 837 p. 374), *benuso(r)* 'one will have come' (§ 872 p. 421). With Zimmer and Conway, I formerly regarded these as 3<sup>rd</sup> plural active (Ber. sächs. Ges. der Wiss., 1890, pp. 214 ff.). But, as we infer from a comparison of *sakrafir* with *sakrim fakiia*don the other Oscan inscr. of the same kind (Rhein. Mus. XLIII 557 f.), they may be 3<sup>rd</sup> singular

deponent. Compare the active and deponent imperatives with *-tu* and *-mu*, used with indefinite subject in the ritual rules of the Iguvine Tables; and the Avest. 3<sup>rd</sup> sing. *zazan-ti* 'one trains, breeds' and others like it (Bartholomae, *Ar. Forsch.* II 82); and a great deal of illustrative matter may be found in Miklosich's essay on Sentences without a Subject (*Subjectlose Sätze*, 2<sup>nd</sup> ed. 1883). There is a third possibility. They may be 3<sup>rd</sup> singular passive, answering to Latin impersonal constructions (*legitur* 'one reads, they read'); Osc. *sakrafir ultiumam* would exactly correspond to Lat. *legitur Vergilium*, *legendum est Vergilium* (see Weisweiler, *Lat. part. fut. pass.*, pp. 70 ff.). The last view is best; it is best supported by Keltic, as will now be shewn.

These Umbro-Samnitic forms run on parallel lines with the Keltic 3<sup>rd</sup> sing. passive; e. g. O.Ir. *do-berar* 'datur' (also *-berr* because of the two *r*'s, but this syncope is not otherwise found — we only have *-canar*, for example; Zimmer, *Kuhn's Zeitschr.* xxx 252 takes a different view), whose absolute bye-form *berir*, like the 3<sup>rd</sup> pl. *bertir* beside *do-bertar* (§ 1082), I believe to be a new Keltic developement; imper. *berar* 'should be brought', Mod.Bret. *quemerer* (i. e. *\*com-berer*) 'is taken', Mod.Cymr. *ni chenir* 'there will be no singing'. Zimmer's view that these Keltic *r*-forms, like the Umbrian and Oscan, are 3<sup>rd</sup> plural active, has not enough to support it.

Remark 1. Zimmer's attempts to prove that the active indefinite idiom with *one* is kept in Britannic (*loc. cit.*, pp. 237 ff.) fail, according to Thurneysen. "They are proved to fail by the single fact that in expressions like 'he is killed' or 'one kills him' the pronoun which is the object can be left out, even in Cymric, thus shewing that the person is regarded as the subject. Furthermore, Zimmer forgets that the passive preterite to the *r*-forms in Britannic, as in Irish (and in Italic), is represented by the part. passive with *-to-*. This indicates that the *r*-form was regarded as a real passive, possibly in protoethnic Keltic (or, if you will, in Italo-Keltic)."

Remark 2. If we assume these Italo-Keltic *r*-forms to be 3<sup>rd</sup> sing. deponent or passive, the question arises whether their *-r* came from *\*-ro*, a form which may have stood to the middle ending *\*-to* in much the same relation as Pali 3<sup>rd</sup> pl. *socarē* 'they trouble themselves' to Skr. *śocantē*.

§ 1081. (II) *r* in combination with other personal endings,

active and middle, which always precede it (cp. Skr. 2<sup>nd</sup> and 3<sup>rd</sup> dual *-athur -atur* § 1077 p. 574).

These forms may be either deponent or middle in Latin. In Keltic, however, these two moods were distinguished in form; for in the deponent conjugation, *r* runs through all persons except the 2<sup>nd</sup> plural, but the passive forms only the 3<sup>rd</sup> singular and plural with such suffixes.

It is possible that once, in protoethnic Italo-Keltic, *r* was used only with middle endings; that in this use it came to be a medio-passive sign; and that it was afterwards added to middle or active endings with the effect of making them middle or passive.

§ 1082. (A) *r* added to Middle endings.

(1) Italic and Celtic 3<sup>rd</sup> pl. *-nto+r*. Lat. depon. *sequi-tur sequo-ntur sequā-tur sequa-ntur* etc., pass. *agi-tur agu-ntur* etc. Umbr. e. g. *emantur* 'emantur'. O.Ir. depon. *-sechethar* 'sequitur' *-sechetar* 'sequontur' perf. *do-mēnatar* 'putaverunt', pass. *do-berthar* 'dantur, dentur'; in the 3<sup>rd</sup> sing. indic. pass. this ending is shown only in the 2<sup>nd</sup> and 3<sup>rd</sup> Conjugations in Irish, as *no charthar* 'amatur' *do-lēicther* 'linquitur' (1<sup>st</sup> Conjug. *doberar*, conjunct. *-berar* and *-berthar*).<sup>1)</sup> The absolute forms *sechidtr* 'sequitur' *sechitir* 'sequontur' *bertir* 'feruntur, ferantur' *carthir* 'amatur' *lēicthir* 'linquitur' etc. are analogical like *berir* 'fertur' (§ 1080 p. 576).

No satisfactory explanation has been given of the Umbr.-Samn. endings with *e*-vowels, which answer to Lat. *-tur -ntur*. Osc. *vincter* 'vincitur' *sakarater* 'sacratur' *sakahāter* 'sanciat' *comparascuster* 'consultus erit' *karanter* 'pascuntur', Pelign. *upsaseter* 'operaretur' or 'operarentur', Marruc. *ferenter* 'ferantur'. Umbr. *herter herte herti hertei* 'oportet' *ostensendi* 'ostenderentur'; for the form *emantur*, see above. The Oscan forms had undoubtedly a short *e*; and I venture to conjecture that parallel to *-to -nto* there were Idg. forms *-te -nte* (cp. 1<sup>st</sup> pl. *-mo(s) -me(s)*, *-mom -mem*, § 1000 p. 535).<sup>2)</sup> Umbr. *hertei* points

1) See footnote 2 to § 1058, page 585.

2) If this be correct, there would be no need to derive the *-re* of Lat. *sequere* (cp. Gr. *ἔνε-ο*) from Idg. *\*-so*; it might be derived from

to *ē*. Very well — we may suppose that there were variants *-tē* beside *-te -nte*, as we saw *-mēs* beside *-mes* in the 1<sup>st</sup> plural (*loc. cit.*). But herter is used in such a way that we may believe it to be conjunctive; and then we are led to ask whether its *ē*, and that of *ostensendi* (*-i* for *-ē*), be not the conjunctive suffix *-ē-*, which could easily creep into the personal ending when there was such a form as *\*ferē-r* (cp. *ferar*).

Remark. On Zimmer's view of these Umbro-Samnite forms (Kuhn's *Zeitschr.* xxx 277), which I regard as wrong, see Buck, *Der Vocalismus der osk. Sprache* pp. 79 f.

(2) Latin forms of the 2<sup>nd</sup> singular, like *spatiārus* possibly contain *\*-ru-r* = *\*-so + r*. See § 1050 p. 562.

(3) In Oscan *censamur* 'censemino, censetor' *r* is seen combined with the Umbr.-Samn. mid.-pass. suffix *\*-mōd*. *-d* was exchanged for *-r*. See § 967 pp. 508 f.

(4) O.Ir. *-ther* in the 2<sup>nd</sup> sing. of deponent verbs, e. g. *-sechther* 'sequeris', is derived from *-the* = Idg. *\*-thēs*, which is preserved without *-r* in the imperative type *cluin-te*. See § 1051 p. 563.

§ 1083. (B) *r* added to Active endings.

(1) Italic and Keltic 1<sup>st</sup> sing. *\*-ōr*, in Keltic only deponent. Lat. *sequor* O.Ir. *-sechur* 'sequor', Lat. *gradior* O.Ir. *-midiur* 'iudico', pass. Lat. *feror capior*. Lat. *ferar* beside Act. *feram*, *ferrer* beside act. *ferrem*; *-r* takes the place of *-m*.

Remark 1. It is of course not certain that *\*-ōr* is the active *-ō + r*. It may be that Italo-Keltic had the 1<sup>st</sup> sing. mid. *\*seqōi* (§ 1041.1. b p. 558), and that this was transformed to *\*seqōr*, as in Oscan *\*-mōd* *\*-mud* became *-mur* (§ 1082. 3).

(2) Italic and Keltic 1<sup>st</sup> pl. *\*-mor*, in Keltic only deponent. Lat. *sequimur sequāmur sequēmur ferimur* etc., O.Ir. *-sechem-mar* 'sequimur, sequamur' perf. *do-mēnammar* 'putavimus'. Whether *\*-mor* was transformed to *\*-mos* by exchanging *-s* for *-r*, or whether it was an extension of *\*-mo* (cp. § 1000. 2. a p. 535), is doubtful. *mm* instead of *m* in Irish is due to the active forms *ammi bermmi* etc. (see § 1006 pp. 537 f.).

Idg. *\*-se*. *ūtāris* would be related to *ūtārus* as Osc. *vincter* to Lat. *vincitur*. Compare § 1050, page 562.

(3) In the Irish deponent perfect we have 1<sup>st</sup> sing. *do-mēnar* 2<sup>nd</sup> sing. *do-mēnar* beside the active forms 1<sup>st</sup> sing. *cechan* for \**ce-can-a* 2<sup>nd</sup> sing. *cechan* (§ 981.4 p. 521, § 989 p. 525). In 3<sup>rd</sup> sing. *do-mēnair* beside act. *cechuin* the non-palatal pronunciation of the *n* is a difficulty. Is this due to the analogy of other persons of the perfect, or because *-gēnair* comes from \**ge-gnā-*?

Remark 2. Neither Italic nor Keltic have an *r*-form in the 2<sup>nd</sup> plural. Latin has *sequimini ferimini* (see II § 71 p. 165). The Irish deponents have the active ending, as *-midid* beside *-midiur*, *do-mēnaid* beside *dō-menar*.

### PERIPHRASTIC MIDDLE IDIOMS (REFLEXIVE).

§ 1084. In several languages, where the Idg. Middle (Skr. *bhāra-tē* Gr. *φέρει-ται*) either dwindled or quite died out, its place was filled by the combination of the Active (or some Middle form degraded until it could not be distinguished from the active) and an Oblique Case of the pronoun which answered to the active form in question, and which referred to it.

From a comparison of Sanskrit and Greek we may believe that this roundabout idiom was general at the time when the Idg. Middle was still in living use. For in Greek and Sanskrit both periphrastic reflexive and middle are used side by side; and this is true, both when the contrast between the subject and object is important, that is, when there is a contrast with some other person, which makes it necessary to lay stress on the person implied by the middle form; and also when the cases are not clearly shown by the middle, or where this could be understood as a passive, so that there was every need to make the expression as clear as possible. Thus we have Skr. *yád yajamānabhāgā praśnāty ātmānam evā prīṇati* (Taitt. Sāh. I 7. 5. 2) 'when he eats his share of the offering, he gets new life in himself' (otherwise it is his task to quicken others), *nēd ātmānaḥ vā prthivī vā hināsani* (Satap.-Brāhm. I 2. 4. 7)

'that I may not destroy either myself or the earth', Gr. ἐμοὶ δὲ δέκ' ἔξελον οἷω (Od. 9. 160) 'but for myself alone I chose ten (goats)', ἀποκρύπτω ἐμαυτόν 'I hide myself' beside ἀποκρύπτομαι 'I hide for myself' or 'I am hidden'. Often enough we find the middle used with the reflexive pronouns, as *tābhīr vaī sá atmānam āprīṇīta* (Tāitt.-Sāh. v 1. 8. 3) 'therewith he enjoyed himself', *sá yajñām atmāna vyādhatta* (Māitr.-Sāh. i 9, 3) 'he changed himself into the offering', ἡ κακῶσαι ἡμᾶς ἡ σφαῖς αὐτοὺς βεβαιώσασθαι (Thuc. i. 33. 3), ὅτι Ξενοφῶν βούλεται ἑαυτῷ ὄνομα καὶ δύναμιν περιποιήσασθαι (Xen. An. v 6, 17). Cp. Lith. *būrna sāu prausiū'-s(i)* § 1086.

§ 1085. The next step is represented in Italic and Keltic. Here the original Middle had got mixt up very much with the *r*-deponent (§§ 1081 ff.). E. g. Lat. *sequitur* O.Ir. *-sechethar* 'sequitur' = Skr. *sácatē* Gr. *ἐπεραι*, Lat. *re-miniscor* O.Ir. *do-muiniur* 'I think' = Skr. *mānyatē*. But it partly gave place to the periphrastic reflexive, Lat. *dedecore se abstinēbat* (ἀπέχετο), *gloriam sibi peperit* (ἐπορίσατο, ἐκτίσατο), *mecum reputo* (σκοποῦμαι, λογίζομαι), O.Ir. *no-m-moidim* 'glorior' (Wb. 14°), lit. 'I pride myself', *act r-an-glana* 'si emundaverit se' (Wb. 30°). In Latin this idiom is often hardly distinguishable from the deponent, as *immiscemus nos rei* and *immiscemur, castris se effundunt* and *effunduntur, relaxat se* and *relaxatur*.

§ 1086. Next come Germanic and Balto-Slavonic, where the Idg. Middle with middle meaning had died out in prehistoric times. — In Gothic the forms remain but have passive meaning; in Balto-Slavonic there are forms of the 1<sup>st</sup> and 2<sup>nd</sup> sing. middle in the place of active forms, see § 1046 p. 560, § 1053 p. 563, and footnote to page 216 above. — Here then the Periphrastic Reflexive is regularly used in place of the Idg. Middle.

Remark. Regularly so used, but not always. Sometimes the Active form alone does duty for the Idg. middle, as Goth. *ga-nisīþ* 'he gets happily through, finds protection or health' as against Skr. *násatē* Gr. *νέται*, Lith. *seka* 'I follow' against Skr. *sácatē* Gr. *ἐπεραι* (Lat. *sequitur* O.Ir. *-sechethar*), O.C.Sl. *mīnjā* 'I think' as against Skr. *mānyatē* (O.Ir. *do-muiniur*). In Gothic, verbs in *-nan* may represent the old Middle, as

*and-bundniþ* 'he lets himself go, gets free, sets off' beside pass. *and-bindada* 'he is released' act. *and-bindiþ* 'he sets free'. There are more of the kind.

Gothic *gavandja mik* O.H.G. *gi-went(i)u mih* 'I turn myself towards, convert me, convertor, return'. Goth. *skama mik* O.H.G. *scamēm mih* 'I am ashamed'. Goth. *ōg mis* 'I fear' (for myself). O.H.G. *furht(i)u mir*, the same. Goth. *gagimand sik* 'they gather together', reflex. In Norse, about the 8<sup>th</sup> century, the pronoun affix itself firmly to the verb in a contracted shape (*-sk* for *sik*, dat. *-ss* for *-ser*). Then *-sk* and *-ss* were used for the 1<sup>st</sup> and 2<sup>nd</sup> persons as well as the third. However, in the oldest period we do find a 1<sup>st</sup> sing. *-mk* (for *mik*), as *heito-mk* 'I call myself' (where the ending *-ō* is kept, though it drops with *heit* 'I call'). This Norse type, much altered and obscured by sound-change and analogy, was also used as a passive. Compare Noreen, Aisl. und Anorw. Gramm. pp. 185 ff.; Paul's Grundriss I 518 ff.; Specht, Das Verbum Reflexivum und die Superlative im Westnord. (Acta Germ. III 1), Berlin 1891.

In Lithuanian *-si* (for *\*sē*) became a universal reflexive, and coalesced with the verb, being used for all persons. It was originally only locative or dative, but afterwards came to be used for the accusative (III § 447 p. 385). *-si* at the end of words has now generally become *-s*. *kelū-s(i)* 'I raise myself, get up' 2<sup>nd</sup> sing. *kelē-s(i)*, and so forth. *bijaū-s(i)* 'I fear'. *džiaugiu-s(i)* 'I enjoy myself'. *būrną prausiū-s(i)* 'I wash my face'. Also *būrną sau prausiū-s(i)*, like Gr. περιποιήσασθαι τι ἑαυτῷ (§ 1084 p. 580). *mūsza-s(i)* 'they struck each other'. When a verb has a prefix, *si* stands between prefix and verb, as *pa-si-keľu* 'I raise myself, rise' (dial. also *pa-si-keľū-s*). Compare Lett. *bistā-s* 'I fear' (in folk-poetry *-si* sometimes survives, and has not yet become *-s*); Pruss. *griki-si* 'they fall into sin' (III § 447 p. 385), with a variant *-sin*, obviously the accusative case, as *etlāiku-sin* 'let him abstain, forbear'. In O.C.Sl. we see the acc. *sę* answering to Pruss. *-sin* as a

(Continued on p. 594.)

[Here follow Tables of the Verb Finite pp. 582—593.]



## 1. Ind. pres. and imperf. act. of Present Class. I.

Appendix to

	Pr.Idg.	Sanskrit	Avestic	Armenian	Greek
<b>Sing. 1.</b>	<b>*és-mi: 'I am'</b>	<i>ás-mi</i>	<i>ah-mi</i>	<i>em</i>	<i>εἰμι</i>
2.	<b>*ési:</b> <b>*és-si:</b>	<i>ási</i>	<i>ahi</i>	<i>es</i>	<i>εἶ, εἶ-ς (εἶ-ς)</i> <i>ἴσσι</i>
3.	<b>*és-ti:</b>	<i>ás-ti</i>	<i>as-ti</i>	<i>ē</i>	<i>ἴσ-τι ἴσ-τι</i>
<b>Plur. 1.</b>	<b>*s-měs(i)</b> <b>(*s-mos(i)):</b>	<i>s-más s-mási</i>	<i>mahi</i>	<i>ēmē</i>	Dor. <i>εἰμῆς</i> , Ion. <i>εἰμῆν</i> , Att. <i>ἴσμεν</i>
2.	<b>*s-té (*s-thé):</b>	<i>s-thá</i>	<i>s-tā</i>	<i>ērē</i>	<i>ἴσ-τε</i>
3.	<b>*s-énti:</b>	<i>s-ánti</i>	<i>h-enti</i>	<i>en</i>	<i>εἰσι, ἴσσι</i>
<b>Dual. 1.</b>	<b>*s-ús(i) (*s-uos(i)):</b>	<i>s-vás</i>	<i>*xw-ahi</i>		[Dor. <i>εἰμῆς</i> etc.]
2.	<b>*s-tés (*s-thés):</b>	<i>s-thás</i>			<i>ἴσ-τόν</i>
3.	?	<i>s-tás</i>	<i>s-tō</i>		<i>ἴσ-τόν</i>
<b>Sing. 1.</b>	<b>*és-η(*és-ηm):</b> <b>'I was'</b>	<i>ás-am</i>	O. Pers. <i>ah-am</i>	<i>ēi</i>	<i>ἦα ἦ, ἦν</i>
2.	<b>*és-s:</b>	<i>ás, ásv-š</i>	<i>*ās</i>	<i>ēr</i>	<i>ἦσα</i>
3.	<b>*és-t:</b>	<i>ás, ásv-t</i>	<i>ās (as)</i>	<i>ēr</i>	Dor. <i>ἦς</i> [ <i>ἦer ἦν</i> ]
<b>Plur. 1.</b>	<b>*és-s-mě(m) *és-</b> <b>-mě(m) (-mō(m)):</b>	<i>ás-ma</i>	<i>a-h-ma</i>	<i>ēaē</i>	<i>ἦμεν</i>
2.	<b>*é-s-te *és-te:</b>	<i>ás-ta</i>		<i>ērē</i>	<i>ἦσ-τε, ἦτε</i>
3.	<b>*é-s-ent *és-ent:</b>	<i>ás-an (s-án)</i>	O. Pers. <i>ah-a</i> (Avest. <i>h-en</i> )	<i>ēin</i>	Dor. <i>ἦν</i> , Boet. <i>ισαν</i> , Att. <i>ἦσαν</i>
<b>Dual. 1.</b>	<b>*é-s-ús *és-ús(-uō):</b>	<i>ás-va</i>			[ <i>ἦμεν</i> ]
2.	<b>*é-s-tom *és-tom</b> <b>(-tem?):</b>	<i>ás-tam</i>			<i>ἦσ-τόν, ἦτον</i> [ <i>ἦ-</i> <i>την</i> ]
3.	<b>*é-s-tām *és-tām:</b>	<i>ás-tām</i>			<i>ἦσ-την, ἦτην</i> [ <i>ἦσ-</i> <i>τον</i> ]

1) When any of the forms here given under a certain heading belong to the place assigned them in meaning alone, while their ending belongs to a different person, they are enclosed in square brackets [ ].

Latin	Irish	Gothic	O.H.G.	Lith.	O.C.Sl.
<i>sum</i>	<i>am</i>	<i>im</i>	<i>b-i m</i>	<i>es-mi</i>	<i>jes-mi</i>
<i>es, es</i>	<i>at</i>	<i>is</i> (§ 990. 1)	<i>(bis bist)</i>	<i>esi</i> (991. 1)	<i>jesi</i>
<i>es-t</i>	<i>is</i>	<i>is-t</i>	<i>is-t</i>	<i>es-ti es-t</i>	O.Russ. <i>jes-ti</i> O.Bulg. <i>jesti</i>
<i>sumus</i>	<i>ammi</i>	<i>sijum</i>	<i>b-irum b-iru- mēs</i>	<i>es-me</i>	<i>jes-mi -my,</i> Mod.Bulg. <i>s-me,</i> Serb. <i>jes-mo</i>
<i>[es-tis]</i>	<i>adi-b</i>	<i>sijuþ</i>	<i>b-irut</i>	<i>es-te</i>	<i>jes-te</i>
<i>sunt, Umbr. s-en t</i>	<i>it</i>	<i>s-ind</i>	<i>s-int</i>	<i>[esti est]</i>	O.Russ. <i>sati,</i> O.Bulg. <i>sati</i>
		<i>siju</i>		<i>es-va</i>	<i>jes-vě</i>
2nd pl. <i>es-tis</i>		<i>sijuts</i>		<i>es-ta</i>	<i>jes-ta</i>
		<i>[s-ind]</i>		<i>[es-ti es-t]</i>	<i>jes-te, jes-ta</i>
pres. <i>es (f)</i>					
					<i>nesi-as-te</i>
					<i>nesi-as-ta</i>
					<i>nesi-as-te</i>

Spaced Type implies that the inflexion of any given form may be regarded as derived straight from that of the parent language.

## 2. Ind. pres. and injunct. (pret.) act. of Present Class X.

	Pr. Idg.	Sanskrit	Avestic	Armenian	Greek
<b>Sing. 1.</b>	<i>*uē-mi</i> 'I blow'	<i>vā-mi</i>	<i>vā-mi</i>	<i>mna-m</i> 'I remain'	<i>ἀη-μι</i>
2.	<i>*uē-si:</i>	<i>vā-si</i>	<i>vā-hi</i>	<i>mna-s</i>	<i>ἀης</i>
3.	<i>*uē-ti:</i>	<i>vā-ti</i>	<i>vā-iti</i>	<i>mna-y</i>	<i>ἀη-σι</i>
<b>Plur. 1.</b>	<i>*uē-mēs(i) (-mos(i))</i>	<i>vā-mā-s - mā-si</i>	<i>vā-mahi</i>	<i>mna-mē</i>	<i>Dor. ἀν-μης. Att.</i>

Latin	Irish	Gothic	O.H.G.	Lith.	O.C.Sl.
<i>pleō, nō</i>	<i>scarimm</i> 'I se- parate'	<i>mitō</i> 'I measure'	<i>mezzō-m</i>	<i>līndau</i> 'I put somewhere'	<i>ima-mi</i> 'I have'
<i>plē-s, nās</i>	<i>scari</i>	<i>mitō-s</i>	<i>mezzō-s</i>	<i>līndai</i>	<i>ima-ši</i>
<i>ple-t, na-t</i>	<i>scarid</i>	<i>mitō-þ</i>	<i>mezzō-t</i>	<i>līndo</i>	O.Russ. <i>ima-ti</i> , O.Bulg. <i>ima-tū</i>
<i>plē-mus, nā- mus</i>	<i>scārmme, -sca- ram</i> (?)	<i>mitō-m</i>	<i>mezzō-mēs, -ō-n</i>	<i>līndo-me</i>	<i>ima-mū</i>
<i>[plē-tis, nā-tis]</i>	<i>-scarid, scarthe</i>	<i>mitō-þ</i>	<i>mezzō-t</i>	<i>līndo-te</i>	<i>ima-te</i>
<i>ple-nt, na-nt</i>	<i>scarit</i>	<i>mitō-nd</i>	<i>mezzō-nt</i>	<i>[līndo]</i>	O.Russ. <i>ima-ti</i> , O.Bulg. <i>ima-tū</i>
		<i>mitōs</i> (?)		<i>līndo-va</i>	<i>ima-ve</i>
2. pl. <i>plē-tis, nā-tis</i>		<i>mitō-ts</i>		<i>līndo-ta</i>	<i>ima-ta</i>
		<i>[mitō-nd]</i>		<i>[līndo]</i>	<i>ima-te, ima-ta</i>
<i>-ba-m</i>	<i>ba</i> 'fui'	<i>iddja</i> 'I went'		<i>miniaŭ</i> 'I remem- bered', <i>buvai</i> 'I was'	
<i>-bā-s</i>		<i>iddjēs</i>		<i>minē, buvai</i>	<i>bē</i> 'eras'
<i>-ba-t</i>	<i>ba</i>	<i>iddja</i>		<i>minē, būvo</i>	<i>bē</i>
<i>-bā-mus</i>				<i>minē-me, būvo-me</i>	
<i>[-bā-tis]</i>				<i>minē-te, būvo- te</i>	
<i>-ba-nt, umbr. -fa-ns</i>				<i>[minē, būvo]</i>	
				<i>minē-va, bū- vo-va</i>	
2. pl. <i>-bā-tis</i>				<i>minē-ta, būvo-ta</i>	
				<i>[minē, būvo]</i>	

## 4. Indic. perf. act.

	Pr. Idg.	Sanskrit	Avestic	Greek
<b>Sing. 1.</b>	* <i>ge-gón-a?</i> * <i>ge-gen-a?</i> 'gonui', * <i>uóid-a?</i> * <i>uóid-a?</i> 'I know':	<i>ja-ján-a</i> [ <i>ja-ján-a</i> ], <i>véd-a</i>	<i>dā-dar-s-a</i> , <i>vaēd-ā</i>	<i>γέ-γον-α</i> , <i>οἶδ-ε</i>
2.	* <i>ge-gón-tha</i> , * <i>uóit-tha</i> :	<i>ja-ján-tha</i> <i>ja-jñ-</i> <i>i-thā</i> , <i>vētt-tha</i>	<i>vōistā</i>	<i>γέ-γον-ας</i> , <i>οἶσθα</i>
3.	* <i>ge-gón-e</i> , * <i>uóid-e</i> :	<i>ja-ján-a</i> , <i>véd-a</i>	<i>dā-dār-a</i> [ <i>va-va-a</i> ], <i>vaēd-ā</i>	<i>γέ-γον-ε</i> , <i>οἶδ-ι</i>
<b>Plur. 1.</b>	* <i>ge-gñ-mē(m)</i> , * <i>uóid-</i> <i>mē(m)</i> , ( <i>mō(m)</i> ):	<i>ja-jñ-i-mā</i> <i>ca-kṛ-</i> <i>mā</i> , <i>vid-mā</i>	<i>su-sru-ma</i> <i>vaox-mā</i>	<i>γέ-γα-μεν</i> <i>γε-γόν-μεν</i> <i>ἰδ-μεν</i> Att. <i>ἰσμεν</i>
2.	?	<i>ja-jñ-ā</i> , <i>vid-ā</i>	<i>ha-nhān-a</i>	<i>γέ-γα-τε</i> , <i>γε-γόν-σθε</i>
3.	* <i>ge-gñ-f(r)</i> , * <i>uóid-f(r)</i> ( <i>-fs</i> ):	<i>ja-jñ-úr</i> , <i>vid-úr</i>	<i>ca-xr-ar</i> , <i>kōit-arē</i>	<i>ci-γε-γά-σσι</i> <i>γε-γόν-σσι</i>
<b>Dual. 1.</b>	* <i>ge-gñ-uē</i> , * <i>uóid-uē</i> ( <i>-uō</i> ):	<i>ja-jñ-i-od</i> <i>ca-kṛ-</i> <i>od</i> , <i>vid-od</i>		[ <i>γέ-γα-μεν</i> etc.]
2.	?	<i>ja-jñ-dihur</i> , <i>vid-</i> <i>dihur</i>		<i>γέ-γα-τον</i> <i>γε-γόν-τον</i> <i>ἰστον</i>
3.	?	<i>ja-jñ-atur</i> , <i>vid-atur</i>	<i>yaēt-atar</i> <sup>o</sup>	<i>γέ-γα-τον</i> <i>γε-γόν-τον</i> <i>ἰστον</i>

## 5. Imper. praes. act.

	Pr. Idg.	Sanskrit	Avestic	Armenian	Greek.
<b>Sing. 2.</b>	* <i>i</i> 'go': * <i>i-dhi</i> 'go': * <i>bhère</i> 'carry': * <i>i-tōd</i> , * <i>bhère-tōd</i> :	<i>i-hi</i> <i>bhāra</i> <i>itād</i> , <i>bhāra-</i> <i>tād</i>	<i>i-di</i> <i>bara</i>	<i>ber</i>	<i>ἴθ-ει</i> <i>ἴ-θι</i> <i>φέρει</i> <i>ἰλθι-τω</i> <i>ἰλθι</i> (Ba)
3.	* <i>i-tōd</i> , * <i>bhère-tōd</i> :	<i>i-tād</i> , <i>bhāra-</i> <i>tād</i> , <i>ēt-u</i> , <i>bhārat-u</i>	<i>aēt-u</i> , <i>bara-tu</i>		<i>ἴ-τω</i> , <i>φέρει-τω</i>
<b>Plur. 2.</b>	* <i>i-tē</i> , * <i>bhère-te</i> : * <i>i-tōd</i> , * <i>bhère-tōd</i> :	<i>i-tā</i> , <i>bhāra-ta</i> <i>i-tād</i> , <i>bhāra-</i> <i>tād</i>		<i>berē</i>	<i>ἴ-τε</i> , <i>φέρει-τε</i>
3.	* <i>i-tōd</i> , * <i>bhère-tōd</i> :	<i>yānt-u</i> , <i>bhārant-u</i>	<i>yant-u</i> , <i>barant-u</i>		<i>ἴ-των</i> , <i>φέρει-των</i> <i>φέρει-στων</i> <i>ἴ-στων</i> <i>-στων</i>
<b>Dual. 2.</b>	* <i>i-tōm</i> ( <i>-tēm</i> ?) * <i>bhère-tōm</i> :	<i>i-tām</i> , <i>bhāra-</i> <i>tām</i>			<i>ἴ-τον</i> , <i>φέρει-τον</i>
3.	* <i>i-tām</i> , * <i>bhère-tām</i> :	<i>i-tām</i> , <i>bhāra-</i> <i>tām</i>			<i>φέρει-των</i>

Latin	Irish	Gothic	O.H.G.
me-min-i, scāb-i	ro ce-chan 'ceoini', ro gād 'I begged'	hai-hāit 'I called', vāit	hiag 'I called', weiz
me-min-istī, scāb-istī	ro ce-chan, ro gād	hai-hāist, vāist	hiagi, weist
me-min-it, scāb-it	ro ce-chuin, ro gād	hai-hāit, vāit	hiag, weiz
me-min-imus, scāb-imus	ro ce-chn-ammār, ro gād-ammār	hai-hāit-um, vit-um	hiag-um, wigg-um (-umēs)
me-min-istis, scāb-istis	ro ce-chnaid, ro gād-aid	hai-hāit-uþ, vit-uþ	hiag-ut, wigg-ut
me-min-ērunt, scāb-ērunt (-ēre)	ro ce-chn-atar, ro gād-atar	hai-hāit-un, vit-un  hai-hāit-u, vit-u  hai-hāit-uts, vit-uts  [hai-hāit-un, vit-un]	hiag-un. wigg-un

Latin	Irish	Gothic	O.H.G.	Lith.	O.C.SL
i age i-tō, agi-tō	beir	bafr	bir	eī-k veizdi veizd vedi ved, vèsk	viždī (§ 949)
i-tō, agi-tō		bafradau			
i-te, agi-te i-tōte, agi-tōte	berid	bafrī-þ	bera-t [beret]	eikite, vèskite	
eu-ntō, agu-ntō		bafrā-ndau			
		bafrā-te	2 <sup>nd</sup> pl. bere-t	eikita, vèskita	
		[bafrā-ndau]			

## 3. Optative pres. act.

	Pr. Idg.	Sanskrit	Avestic	Greek
<b>Sing. 1.</b>	<i>*s-ix̥-m</i> <i>*s-ix̥-m</i> 'sim'	<i>s-yā-m s-iyā-m</i>	<i>xyēm</i>	<i>ειην</i>
2.	<i>*s-ix̥-s</i> <i>*s-ix̥-s:</i>	<i>s-yā-s s-iyā-s</i>	<i>xyā</i>	<i>ειης</i>
3.	<i>*s-ix̥-t</i> <i>*s-ix̥-t:</i>	<i>s-yā-t s-iyā-t</i>	<i>xyāh</i>	<i>ειη</i>
<b>Plur. 1.</b>	<i>*s-i-mē(m)</i> ( <i>mō(m)</i> ): <i>*bhy-i-i-ymē(m)</i> ( <i>-ymō(m)</i> ):	<i>s-yā-ma s-iyā-ma</i>	<i>xyāmā</i> <i>buyamā</i> i. e. <i>bo-</i> <i>-iy-amā</i>	<i>ει-μεν, ειη-μεν</i>
2.	<i>*s-i-tē:</i>	<i>s-yā-ta s-iyā-ta</i>	<i>xyāta</i>	<i>ει-τε, ειη-τε</i>
3.	<i>*s-i-ent</i> <i>*s-i-ent:</i>	<i>s-y-úr s-iy-úr</i>	<i>hyān hyār</i>	<i>ει-εν, ειη-σαν</i>
<b>Dual 1.</b>	<i>*s-i-yē</i> ( <i>-yō</i> ):	<i>s-yā-va s-iyā-va</i>		
2.	<i>*s-i-tóm</i> ( <i>-tém?</i> ):	<i>s-yā-tam s-iyā-tam</i>		<i>ει-τον, ειη-τον</i>
3.	<i>*s-i-tām:</i>	<i>s-yā-tām s-iyā-tām</i>		<i>ει-την, ειη-την</i>
<b>Sing. 1.</b>	<i>*bhéro-i-ṇ(m)</i> 'feram'	<i>bhárēy-am</i>		<i>φεροι-μι, φεροι-ν</i>
2.	<i>*bhéro-i-s:</i>	<i>bhárē-ṣ</i>	<i>barōi-ṣ</i>	<i>φεροι-ς</i>
3.	<i>*bhéro-i-t:</i>	<i>bhárē-t</i>	<i>barōi-h</i>	<i>φεροι</i>
<b>Plur. 1.</b>	<i>*bhéro-i-mō(m)</i> ( <i>-mē(m)</i> ):	<i>bhárē-ma</i>	<i>baraē-ma</i>	<i>φεροι-μεν, Dor.</i> <i>-οι-μες</i>
2.	<i>*bhéro-i-te:</i>	<i>bhárē-ta</i>	<i>baraē-ta</i>	<i>φεροι-τε</i>
3.	<i>*bhéro-i-ṇt:</i>	<i>bhárēy-ur</i>	<i>baray-en</i>	<i>φεροι-εν</i>
<b>Dual 1.</b>	<i>*bhéro-i-yō</i> ( <i>-yē</i> ):	<i>bhárē-va</i>		[ <i>φεροι-μεν, Dor.</i> <i>-οι-μες</i> ]
2.	<i>*bhéro-i-tom</i> ( <i>-tem?</i> ):	<i>bhárē-tam</i>		<i>φεροι-τον</i>
3.	<i>*bhéro-i-tām:</i>	<i>bhárē-tām</i>		<i>φεροι-την</i>

Latin	Gothic	O.H.G.	Lith.	O.C.Sl.
<i>s-i-e-m, sim</i>	<i>sifau, vitfau</i> 'I would know'	[ <i>s-i, wizzī</i> 'I would know' ?]		
<i>s-i-ē-s, sis</i>	<i>sijái-s, vitei-s</i>	<i>s-i-s -st, wizzī-s -st</i>		<i>jaždī</i> 'eat thou' (§ 949)
<i>s-i-e-t, sit</i>	<i>sijái, viti</i>	<i>s-i, wizzī</i>		[ <i>jaždī</i> (949)]
<i>s-i-mus</i>	<i>sijái-ma, vitei-ma</i>	<i>s-i-m, wizzīm</i>		<i>jad-i-mū</i>
[ <i>s-i-tis</i> ]	<i>sijái-þ, vitei-þ</i>	<i>s-i-t, wizzī-t</i>		<i>jad-i-te</i>
<i>s-ie-nt, sint, Umbr. sins</i>	<i>sijái-na, vitei-na</i>	<i>s-i-n, wizzī-n</i>		
	<i>sijái-va, vitei-va</i>			<i>jad-i-vē</i>
2 <sup>nd</sup> pl. <i>s-i-tis</i>	<i>sijái-ta, vitei-ta</i>			<i>jad-i-ta -te</i>
	[ <i>sijái-na, vitei-na</i> ]			
	<i>baifrau</i>	[ <i>berēf</i> ]		
	<i>baifrái-s</i>	<i>berē-s</i>	Preuss. <i>imai-s</i> 'take thou'	<i>berī</i>
	<i>baifrái</i>	<i>berē</i>	<i>te-sukē</i> 'let him turn'	<i>berī</i>
	<i>baifrái-ma</i>	<i>berē-m</i>		<i>berē-mū</i>
	<i>baifrái-þ</i>	<i>berē-t</i>	Preuss. <i>imui-ti</i>	<i>berē-te</i>
	<i>baifrái-na</i>	<i>berē-n</i>	[ <i>te-sukē</i> ]	
	<i>baifrái-va</i>			<i>berē-vē</i>
	<i>baifrái-ta</i>			<i>berē-ta -te</i>
	[ <i>baifrái-na</i> ]		[ <i>te-sukē</i> ]	



## 7. Indic. pres. und injunct. (pret.) mid. of Present Classes I and II.

	Pr. Idg.	Sanskrit	Avestic
<b>Sing. 1.</b>	<i>*ēś-mai</i> 'I sit' (-mai); <i>*bherōi</i> 'I bring me' etc.:	<i>ās-ē; bhr̥rē</i>	<i>ger<sup>o</sup>-z-ē; barē</i>
2.	<i>*ēś-sai</i> (-sai); <i>*bhere-sai</i> (-sai):	<i>ās-sē; bhāra-sē</i>	<i>raosē; bara-<sup>o</sup>hē</i>
3.	<i>*ēś-tai</i> (-tai); <i>*bhere-tai</i> (-tai):	<i>ās-tē; bhāra-tē</i>	<i>ās-tē; bara-itē</i>
<b>Plur. 1.</b>	<i>*ēś-medhai</i> (-medhai); <i>*bhero-medhai</i> (-medhai):	<i>ās-mahē; bhārā-mahē</i>	<i>ciš-maidē; barā-maid-</i>
2.	?	<i>ādhoē; bhāra-dhoē</i>	<i>op. mer<sup>o</sup>uōg<sup>o</sup>-duyē; bara-duy<sup>o</sup>- -pivē</i>
3.	<i>*ēś-ntai</i> (-ntai); <i>*bhero-ntai</i> (-ntai):	<i>ās-atē; bhr̥dra-ntē</i>	<i>ānh-antē op. mer<sup>o</sup>nc-aītē; bara-ntē</i>
<b>Dual 1.</b>	<i>*ēś-medhai</i> (-medhai); <i>*bhero-medhai</i> (-medhai):	<i>ās-va hē; bhārā-va hē</i>	
2.	?	<i>ās-āihē; bhr̥rēihē</i>	
3.	?	<i>ās-āiz; bhr̥rēiz</i>	—; [ <i>barōipē</i> ]

	Pr. Idg.	Sanskrit	Avestic
<b>Sing. 1.</b>	?	<i>ās-i; ā-bharē</i>	<i>aōj-i; a-barē</i>
2.	<i>*ēś-thēs; *(e)bhere-so</i> (-se?):	<i>ās-thās; ā-bhara-thās</i>	<i>aōy-iā; a-bara-<sup>o</sup>ha</i>
3.	<i>*ēś-to</i> (-te?); <i>*(e)bhere-to</i> (-te?):	<i>ās-ta; ā-bhara-ta</i>	<i>mrū-ta; a-bara-ta</i>
<b>Plur. 1.</b>	<i>*ēś-medhō; *(e)bhero-medhō</i>	<i>ās-mahi ā-bharā-mahi</i>	<i>var<sup>o</sup>-maidī</i>
2.	?	<i>ādhoam; ā-bhara-dhoam</i>	<i>i-dām; a-bara-<sup>o</sup>uam</i>
3.	<i>*ēś-nto</i> (-nte?); <i>*(e)bhero-nto</i> (-nte?):	<i>ās-ata; ā-bhara-nta</i>	<i>dar<sup>o</sup>s-atā, mras-anta; a- bare-nta</i>
<b>Dual 1.</b>	<i>*ēś-medhō; *(e)bhero-medhō</i>	<i>ās-va hi; ā-bharā-va hi</i>	
2.	?	<i>ās-āihām; ā-bharēihām</i>	
3.	?	<i>ās-āitām; ā-bharēitām</i>	<i>a-srv-ātem; a-baraēm</i>

Greek	Gothic	Lith.	O.O.Sl.
ἔμαι; φέρομαι	—; O.Icel. <i>heite</i> , Goth. [ <i>baírada</i> ]	<i>vel-mē-s(i)</i>	
ἔσαι; φέρε-αι; φέρη	—; <i>baíra-za</i>	op. <i>desč-s(i)</i>	<i>jasi</i>
ἔσ-ται; φέρε-ται	—; <i>baíra-da</i>		
ἔμεθα; φερό-μεθα	—; [ <i>baíra-nda</i> ]		
ἔσθε; φέρε-σθε	—; [ <i>baíra-nda</i> ]		
ἔ-νται; ἔνται; φέρο-νται	—; <i>baíra-nda</i>		
ἔμεθον; φερό-μεθον			
ἔσθον; φέρε-σθον			
ἔσθον; φέρε-σθον			

Greek	Latin	Irish
ἔμην; ἐ-φερό-μην		
ἔσο, ἐ-δό-σθης; ἐ-φέρει-ο ἐ-φέρειον	op. <i>rē-re, -ris, spatiārus; se-que-re, -ris</i>	op. <i>cluin-te; -sechther</i>
ἔστο; ἐφέρει-το	<i>da-tu-r; sequi-tu-r — Oso. vinc-ter</i>	op. <i>as-bert; -sechethar</i>
ἔ-μεθα; ἐ-φερό-μεθα		
ἔσθε; ἐ-φέρει-σθε		
ἔ-ατο, ἔντο; ἐ-φέρει-ντο	<i>da-ntu-r; sequo-ntu-r — Oso. kara-nter</i>	—; <i>-bertar, -sechatar</i>
ἔμεθον; ἐ-φερό-μεθον		
ἔσθον; ἐ-φέρει-σθον		
ἔσθον; ἐ-φέρει-σθον		

general reflexive pronoun; e. g. *privedaḥ se* 'I take myself somewhere, turn towards', *bojaḥ se* 'I fear', *smējaḥ se* 'I laugh'. This *se*-reflexive also got a passive meaning; as *ljubljaaše se gospodīmī* 'he was loved of the Lord'.

### THE VERB INFINITIVE (VERBAL NOUNS).<sup>1)</sup>

§ 1087. Our description of the Verb in the strict sense of the word is now at an end. But in its wider sense the Verb includes several classes of nouns, substantive and

1) For the sake of completeness some works are given here which have been mentioned before.

On the Indo-Germanic Verb Infinitive in General. W. von Humboldt, *Über das Wesen des Infinitivs und Gerundiums*, A. W. von Schlegel's Indische Biblioth., II (1824) 71 ff. *Idem*, *Über den Infinitiv*, Kuhn's Zeitschr. II 242 ff. Max Schmidt, *Über den Infinitiv*, Ratibor 1828. C. E. A. Schmidt, *De infinitivo*, Prenzlau 1827. A. Höfer, *Vom Infinitiv, besonders im Sanskrit*, Berlin 1840. C. Fritzsche, *De substantia in verbo constituta vel de participio et infinitivis*, Görlitz 1865. Schömann, *Zur Lehre vom Infinitiv*, Fleckeisen's Jahrb. 1869 pp. 209 ff. E. Wilhelm, *De infinitivi vi et natura*, Eisenach 1869. *Idem*, *De infinitivi linguarum Sanscritae Bactricae Persicae Graecae Oscanae Umbricae Latinae Goticae forma et usu*, Eisenach 1873. J. Jolly, *Geschichte des Infinitivs im Indogermanischen*, München 1873. Th. Benfey, *dārdnē dāmanē dōmeva*, und die Infinitive auf *eva*, *Orient und Occident* I 606 ff. L. Tobler, *Über das Gerundium*, Kuhn's Zeitschr. xvi 241 ff. J. Jolly, *Zur Lehre vom Particip*, Sprachwissenschaftl. Abhandl. aus G. Curtius' grammat. Gesellsch. Leipz. 1874, pp. 71 ff. Th. Benfey, *Indogermanisches Particip Perfecti Passivi auf tua oder tra*, Nachr. von der Gesellsch. d. Wiss. zu Gött. 1873 pp. 181 ff. = Kleinere Schriften I 2 and 159 ff. H. Ebel, *Das Suffix -ant und Verwandtes*, Kuhn's Zeitschr. iv 321 ff. M. Bréal, *Origine du suffixe participial ant*, *Mém. Soc. Ling.* II 188 ff. F. Baudry, *Le t du suffixe participial ant*, *ibid.* 393 ff. Bartholomae, *Zur Flexion der nt-Participien*, Bezzenberger's Beitr. xvi 261 ff. The Author, *Zur Geschichte der Nominalsuffixe -as-, -jas-, -vas-*, Kuhn's Zeitschr. xxiv 1 ff. J. Schmidt, *Das Suffix des part. perf. act.*, *ibid.* xxvi 329 ff. W. Schulze, *Zum part. perf. act.*, *ibid.* xxvii 547 ff.

Aryan. H. Brunnhofer, *Über die durch Anhängung der dativisch flectierten Wurzel dha, dhā, dhi, dhū an beliebige andere Wurzeln gebildeten Infinitive des Veda und Avesta*, Bezzenberger's Beitr. xv 262 ff. A. Ludwig, *Der Infinitiv im Veda*, Prag 1871. M. Müller, *Grammatische Formen im*

adjective; these are the Infinitive, Supine, Absolutive, Gerund, Participle, and Gerundive.

Sanskrit, welche den sogenannten Infinitiven im Griech. und Lat. entsprechen, Essays iv 420 ff. H. Brunnhofer, Über Dialektspuren im ved. Gebrauche der Infinitivformen, Kuhn's Zeitschr. xxv 329 ff. *Idem*, Über die durch einfache Fleetierung der Wurzel gebildeten Infinitive des Veda, *ibid.* xxx 504 ff. Th. Benfey, Zu dem sanskr. Infinitiv *manz*, Orient und Occident II 132. A. Barth, Le gérondif sanscrit en *tvā*, Mém. Soc. Ling. II 238 ff. Bartholomae, Altind. Infinitive auf *-man* und *-mani*, Idg. Forsch. I 495 ff. J. Jolly, Der Infinitiv im Zendavesta, Kuhn-Schleicher's Beitr. VII 416 ff. Geldner, Ein neuer Infinitiv im Avesta, Bezenberger's Beitr. XII 160 f. Bartholomae, Noch zwei avest. Infinitive, *ibid.* xv 12 f. *Idem*, Die Infinitivbildung im Dialekt der Gāthā's, Kuhn's Zeitschr. xxviii 17 ff. *Idem*, Die ar. Flexion der Adjectiva und Participia auf *nt*, *ibid.* xxix 487 ff. H. Kern, Le suffixe *ya* du sanscrit classique, *ia* de l'arien, Mém. Soc. Ling. II 321 ff.

Greek. K. Eichhoff, Über den Infinitiv im Griech., Cref. 1831. Delbrück, De infinitivo Graeco, Halle 1863. *Idem*, Der griech. Infinitiv auf *-ειν*, Kuhn's Zeitschr. XI 317 f. L. Meyer, Der Infinitiv der homer. Sprache, Göt. 1856. Simmerle, Zur Bildung der homer. Infinitivformen, Innsbruck 1874. C. Meierheim, De infinitivo Homérico, I. Göt. 1875, II. Lingen 1876. Abel, De infinitivi Graeci forma, Budapest 1878. L. Parmentier, L'infinitif *φίεσθαι*, Mém. Soc. Ling. VI 391 ff. Bartholomae, Das griech. Infinitivsuffix *-σθαι*, Rhein. Mus. XLV 151 ff. Moisisstzig, De adiectivis Graecis, quae verbalia dicuntur, Progr. von Konitz 1844. 1868 etc. Ch. E. Bishop, De adiectivorum verbalium *-ro*; terminatione insignium usu Aeschyleo, Leipz. 1889. A. Funck, Das Verbaladjectiv auf *-reo*, Rhein. Mus. xxxiii 615 ff.

Italic. L. Lange, Über die Bildung des lat. infinitivus praes. pass., Denkschr. der Wiener Akad. x (1860) 1 ff. F. Sander, Über die Bildung des lat. infinitivus praes. pass., Stade 1864. G. Schönberg, Ein Erklärungsversuch des lat. mediopassiven Inf. auf *-ier* und *-rier*, Kuhn's Zeitschr. xvii 153 ff. Giacomino, Dell' infinitivo pres. pass. latino, Savona 1880 [G. Meyer]. V. Henry, Les infinitifs médiopassifs du latin Mém. Soc. Ling. VI 62 ff. *Idem*, Esquisses morphologiques V, Les infinitifs latins, Paris 1889. A. Miodoński, Zur Erklärung der Infinitive auf *-ier* *-rier*, Arch. f. lat. Lexikogr. VII 132. E. H. Miles, The Passive Infinitive in Latin, Class. Review v 198 f. S. Brandt, Infinitivus futuri passivi auf *-iuri*, Arch. f. lat. Lexikogr. II 349 ff. III 457. J. P. Postgate, The Latin Future Infinitive in *-tutum*, Cambridge Phil. Soc. Proceed. 1889 p. 6 and Class. Review v 301. C. Pascal, La formazione degl' infinitivi latini, Rivista di filol. XIX 471 ff. E. Walder, Der Infinitiv bei Plautus, eine sprachwissenschaftliche Untersuchung, Berl. 1874. E. W. G. Wachsmuth, Von dem Gerundio, Supino und den damit verwandten Participien, Günther und Wachsmuth's Athenäum I (1816) 37 ff. Deecke,

Of these, which hold a place halfway between the Noun and the Verb, some general account has been given in vol. II

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§ 144 pp. 456 f., and § 156 pp. 470 ff. Their Suffixes, both formative and case-suffixes, have been described each in its proper place. It remains to pass them in general review, and to point out certain peculiarities which have not yet been touched upon, or others on which I have had reason to change my view.

### 1. VERBAL SUBSTANTIVES.

§ 1088. Nomina Actionis, which appear in more than one language as Infinitive, Supine, or Gerund.

(1) Root-Nouns. Dat. Skr. *nir-djē* 'to drive out', Lat. *ag-ī*; in Greek this type may be represented by infinitives such as *χεῖν-αι ἐνέγκν-αι* (§ 504 p. 67 f.). See II § 162 pp. 489 f.

(2) -s- -es- between Root and Case-Suffix; this cannot be separated from the Noun-suffix -es- (-as- -s-) or -s- in the aorist. Dat. Skr. *ji-ṣ-ē* 'to conquer', *doh-ās-ē* 'to milk', Gr. *δειῖν-αι* 'to show', Lat. *da-r-ī* (cp. loc. *da-r-e ag-er-e*). See II § 132 pp. 413, 414 f., 416, 418, § 162 p. 489 f., III § 251 p. 153, § 254 p. 155, § 272 p. 172, IV § 655 p. 190, § 824 p. 363.

(3) Suffix -men-. Dat. Skr. *dā-man-ē* Gr. *δό-μεν-αι* 'to give' Lat. 2<sup>nd</sup> pl. imper. *da-min-ī*; Skr. *vid-mán-ē* 'to learn' Gr. *ἰδ-μεν-αι* 'to know'. Loc. Skr. *dhār-man* 'to hold up' Gr. *δό-μεν* 'to give'. See II § 71 p. 165, § 117 p. 367, III § 251 p. 153, § 257 p. 158.

(4) Suffix -yen-. Dat. Skr. *dā-ván-ē* Gr. Cypr. *δο-φεν-αι*

Keltic. Windisch, Zum irischen Infinitiv, Bezzenger's Beitr. II 72 ff. Loth, Le particip de nécessité en celtique, Mém. Soc. Ling. VI 66 ff.

Germanic. A. Denecke, Der Gebrauch des Infinitivs bei den ahd. Übersetzern des 8. und 9. Jahrh., Leipz. 1880. Paul, Zur Bildung des schwachen Präteritums und Participiums, Paul-Braune's Beitr. VII 136 ff.

Balto-Slavonic. W. Miller, Über den letto-slavischen Infinitiv, Kuhn-Schleicher's Beitr. VIII 156 ff. Schleicher, -tē (d. i. -tai) als Endung des Infinitivs im Litauischen, *ibid.* I 27 ff. Forssmann, Der Infinitiv im Ostromir'schen Evangelium, Festschr. des Protest. Gymn. zu Strassb. 1888 p. 245 ff. Miklosich, Das Participium praet. act. I (in Old Slovenian), Sitzungsber. d. Wiener Akad. LXXXI (1875) 83 ff. *Idem*, Das Partic. praes. act. auf *ę* statt auf *y*, *ibid.* 95 ff.

Att. *δοῦναι* 'to give'; Avest. *vid-van-ōi* Gr. *εἰδέναι* for \**f-εἰδ-  
-f-εν-αι* 'to know'. Loc. Avest. *rōiṣ-wan* 'to make run together',  
with which perhaps should be compared Greek Infinitives like  
as *δοῦν* = \**δο-f-εν* (§ 1093. 4).

(5) -*sen-* i. e. *s+en* (cp. 2). Skr. loc. -*san-i*, e. g. *sak-śān-i*  
'to be with'. With this probably goes the Gr. infin. type  
Ion. Att. *φέρειν* Dor. Lesb. El. *φέρην* for \**φερε-εν*. See  
II § 114 p. 347.

(6) Suffix -*ti-*. Dat. Skr. *pi-táy-ē* 'to drink', see II § 100  
p. 298, III § 249 p. 149, § 251 p. 153. The explanation of  
Avest. *mrūitē* is uncertain, see III § 249 p. 150, § 260 Rem.  
p. 161. Loc. Lith. *dektē* 'to burn', see III § 260 p. 161, Hirt,  
Idg. Forsch. I 27. The Lith. infinitive in -*ti*, as *dā'-ti* 'to give',  
and the O.C.Sl. inf. in -*ti* as *da-ti* 'to give', are probably  
locative, standing for \**-tēi* or \**-teḡ*. But Lith. -*ti* may be  
derived from \**-tḡ-ai* (dative); this would become \**-tḡē*, then  
\**-tē*, and lastly, because of the accent (cp. dat. *δό-μεναι*), -*ti*  
(cp. 2<sup>nd</sup> sing. *verti* for \**ver-tḡē* § 991 p. 528) and would be  
related to Skr. -*tay-ē* (see above) as Pruss. -*tw-ei* to Skr.  
-*tav-ē* (7). And O.C.Sl. -*ti* may also be the Idg. locative -*ē*  
for -*ēi* (cp. Lith. *dektē*). See III § 260 p. 161, Hirt, Idg.  
Forsch. I 28, Streitberg, *ibid.* 271 und 289. It is wholly  
doubtful how we are to explain such Lith. infinitive forms as  
*dā'-tē*; see III § 260 p. 161, Hirt, as cited pp. 27 f., Streitberg  
*ibid.* 271.

(7) Suffix -*tu-*. Dative Skr. *dhā-tav-ē* 'to place', Pruss.  
*dā-tw-ei* 'to give'. Locative supine Lat. *da-tū* O.C.Sl. *da-tu*  
'to give', ground-form -*tēu* or -*teu*. Accusative Skr. *dhā-tu-m*  
Lat. sup. *con-ditum* Lith. sup. *dē-tu* (*dē-tū*, cp. opt. 1<sup>st</sup> pl. *dētum-  
-bime*) O.C.Sl. sup. *dē-tū* from √*dhē-* 'place'. See II § 108  
pp. 323 ff., III § 250 p. 152, § 261 p. 161 f.

(8) Suffix -*o-*. Accusative Skr. adverbial gerund  
*abhy-ā-kṛdmam* 'approaching', Umbr. *er-om* Osc. *ez-um*  
'esse'; Greek similar forms perhaps are aor. 2<sup>nd</sup> sing.  
imper. Syrac. *λάβον* 'take' Att. *δείξον* 'show' etc. (*λάβον* :

*δεῖξον* = Skr. *-āj-ē* Gr. *χεῖν-αι* : *ji-ṣ-ē* Gr. *δεῖξαι* = Skr. *bhuj-yāi* : *a-vyāth-iṣ-yāi*). See II § 60 p. 114.

(9) There is a close connexion between the Aryan dative infinitive in *-dhāi*, as Skr. *vāha-dhyai* 'to convey' (other suffixes with the same value are used, *-dhēyaya* *-dhai* and *-dhē*), and the Greek dative infinitive in *-σθαι*, as *ἐπε-σθαι* 'to follow'. See § 1089. 12, § 1093. 8, Bartholomae in Rhein. Mus. XLV 151 ff.

§ 1089. Aryan. Alongside of complete Infinitives we meet many other forms which stand on the line between infinitives and nomina actionis. Thus it is impossible to define sharply the infinitive in this branch. In what follows no attempt has been made to give complete lists, at least of what may be called Infinitives *in posse*.

But it is only in the older dialect that Sanskrit shows this rich variety of infinitive forms. The classical language knows only that in *-tum* (9).

(1) Root-Nouns, see § 1088. 1. Dative Skr. *drś-ē* Avest. *dar's-ōi* 'to see'. Locative Skr. *drś-i* 'to see'. Gen.-Abl. Skr. *ā-tīd-as* 'to pierce'. Accus. Skr. *śubh-am* 'to shine, be magnificent', Avest. *dqm* 'to place'.

(2) *-s- -es-* between Root and Case-Suffix; see § 1088. 2. Dat. Skr. *ji-ṣ-ē* 'to conquer' *dōh-ās-ē* 'to milk', Avest. *av-anh-ē* 'to help'. Gen.-Abl. Avest. *aēnanh-ō* 'to force'.

(3) Suffix *-men-*, see § 1088. 3. Dative Skr. *dā-man-ē* 'to give', Avest. *stao-mainē* 'to praise'. Locative Skr. *dhār-man* 'to hold up'; Loc. Skr. *sāvī-man-i* 'to uplift', Avest. *caš-mainī* 'to behold' (so the new recension, in place of the form *caš-mainē* given in II § 117 p. 369).

Remark. The Avestic loc. forms *caš-mān* etc., which we classed as infinitive in II § 117 p. 369 and III § 257 p. 158, comparing them with Oret. inf. *δο-μην*, are now denied to be infinitive at all by Bartholomae (Idg. Forsch. I 495 f.).

(4) Suffix *-nen-*, see § 1088. 4. Dative Skr. *dā-vān-ē* 'to give', Avest. *vid-van-ōi* 'to know'. Locative Avest. *rōiṣ-wan* 'to cause to flow together'.



(5) *-sen-*, see § 1088. 5. Dative Avest. *srao-šan-ē* 'to hear'. Locative Skr. *sak-śān-i* 'to be with'.

(6) Suffix *-ter-*, cp. Avest. *dar°-prai*, no. 11. Locative Skr. *vi-dhartār-i* 'to divide up, distribute'.

(7) Suffix *-i-*. Dative Skr. *dyś-āy-ē* 'to see'. See II § 93 p. 280, III § 249 p. 149, Bartholomae, Bezz. Beitr. xv 238.

(8) Suffix *-ti-*, see § 1088. 6. Dative Skr. *pī-tāy-ē* 'to drink', Avest. *ker°-tēē* 'to complete'. Locative Skr. *sātāi* 'to attain' (III § 260 p. 159 f.). Instrumental Skr. *at-i* 'to help', Avest. *fra-mrūiti* 'to recite', see III § 249 p. 150, Bartholomae as cited 245 f. Gen.-Abl. Avest. *dar°tōi-š* 'to see'. Accusative Avest. *astīm* (= *\*a-sth-ti-m*) 'to stand by'.

(9) Suffix *-tu-*, see § 1088. 7. Dative Skr. *dhd°-tav-ē* 'to place' (cp. *dātavāi* no. 16). Gen.-Abl. Skr. *dhd°-tō-š* 'to place'. Accusative *dhd°-tu-m* 'to place', which, as has been said, is the only classical type of infinitive.

(10) Suffix *-tno-* *-tyno-*. Locative Avest. *aiwi-šōi-pnē* 'to inhabit', O.Pers. *car-tanaīy* 'to do'. See II § 69 p. 161.) But these may be regarded as the dative from stems containing the suffix *-ten-*.

(11) Suffix *-tro-*. Dat. Avest. *dar°-prai* 'to hold fast' (cp. 6).

(12) Suffix *-jo-* (cp. *-jo-* as participial suffix § 1099. 3). Dat. Skr. *bhuj-yāi* 'to enjoy', also *-yaj-yā* 'to honour' like *sakhyā*, and *-yājyāya* 'to honour' like *ṛkaya* (III § 246 p. 145), Avest. *vaēd-yāi* 'to recognise'. Skr. *a-vyāth-iš-yāi* beside the s-Aorist 2<sup>nd</sup> sing. mid. *vyath-iš-phās* from *vyath-* 'to waver' (Bartholomae as cited, 229 f.). Loc. Avest. *verēidyē* 'to help on' (Bartholomae, as cited, 240). Acc. Skr. *-vidya-m* 'to find'.

The same suffix occurs in the Aryan inf. in *\*-dhyaī* (dative), as Skr. *vāha-dhyāi* Avest. *vazaidyāi* 'to convey, carry'. This form is a combination of the two noun-stems *vaha-* and *dh-ya-* ( $\sqrt{dhē}$ ), compare these other forms, also used

1) The connexion there assumed between the Latin gerund in *-ndo-* and the Lithuanian participia necessitatis in *-tina-* now seems to me very dubious. See Remark to § 1103.

as infinitive, *vayō-dhēyāya* *vayō-dhāi* 'for giving of strength' and *śrad-dhē* 'for cherishing of trust'. When *vāhadhyāi* had got associated with *vāha-ti* 'conveys, carries', Sanskrit formed *iṣayā-dhyāi* beside *iṣayā-ti* 'is strong', *prṇā-dhyāi* beside *pr-ṇā-ti* 'fills', Avest. *srāvayeidyāi* beside *srāvayeiti* 'causes to hear', *ver'n-dyāi* beside *ver'n-tē* 'chooses' (§ 599 p. 142), *mer'ag'-dyāi* beside *mer'nc-inti* 'they destroy' (§ 626 p. 162) and the like. See § 1088. 9.

(13) Suffix *-iā-*. Acc. Avest. *xwairyam* 'to devour'.

(14) Suffix *-t-īo-* (cp. *-t-īo-* as a participial suffix § 1100. 4). Dat. Skr. *i-tyāi* 'to go'.

(15) Suffix *-uo-*. Loc. Avest. *dā-vōi* 'to place, to give'.

(16) Suffix *-teyo-* (cp. Gr. *διωκ-τέος* § 1099. 4). Dat. Skr. *dā-tavāi* 'to give', also *sār-tavā* 'to stream' like *sakhyā* (III § 246 p. 145). See Bartholomae as cited 224 ff., where conjecture a is offered by way of explaining the double accent.

§ 1090. The Sanskrit Gerund (II § 108 p. 327) in *-y-ā* *-ty-ā*, as *ā-gam-ya* *ā-ga-tya* lit. 'with a coming' (III § 278 p. 182), and that in *-tvā* as *śru-tvā* lit. 'with a hearing' (II § 108 p. 327, III § 279 p. 183), are Instrumental. There is another group in *-tvī*, as *bhū-tvī*, which Bartholomae explains as locative (Bezz. Beitr. xv 227, 240, 241); a group in *-tvāya*, which is dative, e. g. *dr̥ṣ-tvāya* (see Bartholomae, pp. 239 f.); and an accusative "adverbial gerund" as *abhy-ā-krāma-m* 'approaching'.

§ 1091. Another class of verbal substantives in Sanskrit consists of the forms which are found in the well-known periphrasis with *cakāra āsa babhūva*, the accusative in *-ām*, as *vidām*. See § 896, p. 445.

§ 1092. In Armenian, the Inf. has an *l*-suffix, as *ta-l* 'to give' from indic. *ta-m*. See II § 76 p. 202, Bugge, Etruskisch und Armenisch I 15.

§ 1093. Greek Infinitive.

(1) It is doubtful whether *χεῖν-αι* *ἐνέγκ-αι* and the like

are the dative of Root-Nouns, to be placed with Sanskrit and Latin infinitives such as *-āj-ē* and *ag-ī*. See § 1088. 1.

(2) Dative in *-σ-αι*, belonging to the *s*-aorist, e. g. *δεῖξαι*. See § 1088. 2. Thess. aor. *ὄν-γραψεν* (Att. *ἀνα-γράψαι*) with *ει* = *αι* (I § 96 p. 90), and *-ν* added on the analogy of other infinitives.

(3) Suffix *-men-*. Dative *-μεν-αι*, loc. *-μεν*, e. g. *δό-μεναι* *δό-μεν*. See § 1088. 3. By contamination of *-μεν* and *-ειν* (*φέρειν*) arose Rhod. *-μειν*, e. g. *θέ-μειν*. Cret. *δό-μην* is probably, like *δό-μεν*, Locative, with a strong-grade formative suffix; cp. Avest. loc. *caš-mān*, see III § 257 p. 158, IV § 1089 Rem. p. 599.

(4) Suffix *-μεν-*. Dative Cypr. *δο-φεν-αι* Att. *δοῦναι* 'to give', Att. *ἀῖναι* 'to blow' for *\*ἀφ-η-(F)εναι* (III § 251 p. 153). Forms like *δοῦν* (Theognis), *εἰξ-εῖν* (Oropus), Lesb. *μεθ'ύσθην* may perhaps be locative in *-μεν* like Avest. *rōiṣ-wan*. See § 1088. 4.

(5) A Locative in *\*-s-en* may perhaps explain Att. *φέρειν* for *\*φερει-εν*. See § 1088. 5.

(6) Doric and Arcadian infinitives in *-ν*, such as *ἄρχεν* *ἀγαγέν*, are obscure. See the Author's Gr. Gr.<sup>2</sup> § 146. 5 p. 175.

(7) Perhaps the imperative in *-ον* (2<sup>nd</sup> sing.), as Syrac. *λάβον* (Att. *λαβέ*) Att. *δείξον*, are infinitive; see § 1088. 8.

(8) The medio-passive Infinitive in *-σθαι* is connected with the Skr. inf. in *-dhyāi -dhēyāya -dhai -dhē*, see § 1088. 9, and § 1089. 12. *εἶδεσθαι* for instance is the dative of a compound consisting of the noun stem *Feιδεσ-* (*εἶδος*) + *\*dhē-\** *dh-* √ *dhē-* 'place, do'); cp. *ἐπεσ-βόλος* and the like, II § 29 p. 50; the Skr. *śrad-dh-ē* corresponds exactly. After the second member of such compounds had sunk into a mere suffix, *εἶδεσθαι* was mentally analysed *εἶδε-σθαι* because such was the structure of the forms associated with it, *εἶδε-ται* and the rest. Then this supposed suffix *-σθαι* was added to other tense-stems, and became a type. It received its medio-passive

meaning because this was the meaning of  $-\mu\epsilon\theta\alpha -\sigma\theta\epsilon$  and similar personal endings with  $\vartheta$ .

§ 1094. Italic Infinitive.

(1) Dat. of Root-Nouns, Lat. depon. pass. *sequ-ī ag-ī*, see § 1088. 1.

(2) Dat. in  $-s-ī -r-ī = *-s-a_i$ , Lat. depon. pass. *da-rī* (O.Lat. *dastī*) *fer-ri*. Loc. in  $-s-e -r-e -er-e = *-s-i *-es-i$ , Lat. act. *da-re es-se ag-ere*. See § 1088. 2.

(3) In Old Latin, and later in poetic style, we meet with deponent or passive forms with the ending *-ier -rier*, having the same value as  $-ī -rī$ ; e. g. *ag-ier da-rier*. In II § 162 Rem. 2 p. 490 f. an attempt is made to explain this type; and my attempt has been followed by others, those of Henry, Miodoński, and Miles (see footnote, page 595); compare further Stolz, Lat. Gr.<sup>2</sup> pp. 380 f. The origin of these forms is still not quite cleared up.

Remark. If we agree with Fr. Müller (Grundr. der Sprachwiss. III 2 p. 651) that *-er* is the exponent of the deponent and passive, and that this was added to forms in  $-ī$ , we must suppose that it has been abstracted from forms like Osc. *vincer* 'vincitur' karanter 'pascuntur'. As pointed out in § 1082. 1, it is possible that the Latin language once had likewise these indicative forms in *-er*.

(4) An infinitive with formative suffix *-men-* is probably to be seen in the Lat. 2<sup>nd</sup> pl. imper. in  $-minī$ , as *da-minī sequi-minī*. See II § 71 p. 165, § 117 p. 373, IV § 1088. 3.

(5) On the Lat. inf. fut. in  $-tūrum$ , as *da-tūrum*, see § 900 p. 448 and no. (7) below.

(6) An Infinitive type is also to be seen in forms like *are* in *are faciō*, see § 578 p. 120, § 896 Rem. p. 445, § 899 p. 447.

(7) In Umbr.-Samn. the inf. pres. act. ends regularly in *-om*, as Umbr. *er-om* Osc. *ez-um* 'esse', Umbr. *fašiu* 'facere' *stiplo* 'stipulari' (for *\*stipla-om*), Osc. *deikum* 'dicere' *moltaum* 'multare' *fatium* 'fari'. See II § 60 p. 114, IV § 1088. 8, § 1103 Rem., Buck, Der Vocalismus der osk. Spr. 123, von Planta, Vocalismus der osk.-umbr. Dialekte 111 f., 272.

Postgate holds that the Latin inf. fut. in *-tūrum* represents the same type, and that its ending is *\*-tū+erom*; see § 900 p. 448.

§ 1095. In Latin there are two Supines, in *-tu-m* (acc.) and in *-tū* (loc.), e. g. *da-tum da-tū*. The former occurs in Umbr., *aseriato* 'observatum' (*-o(m)* for *-u(m)*, I § 49 p. 42). See § 1088. 7.

On the Latin Gerund with *-ndo-* see § 1103. 3.

§ 1096. Where other languages use the Infinitive, Irish has instead a group of nomina actionis which do not lose their noun character, and when an object is express, it is put in the dependent genitive (II § 156 p. 471). As a rule, each verb has some noun from the same root ready to be used as the infinitive; the strong verbs having nouns with the suffixes *-men-*, *-ti-*, *-tu-* and others (Zeuss-Ebel, Gr. Celt. 483 ff., Windisch, Bezz. Beitr. II 75, Ir. Gr. pp. 97 ff.), and the weak verbs usually nouns with *-tu-*, e. g. *nertad* 'a strengthening' beside *nertiam* 'I strengthen' (II § 108 p. 329). Most commonly these are used in the dative with *do* 'to', as Mid.Ir. *do blith* 'to grind, for grinding' (pres. *melim*) *do nertad* 'for strengthening'. This is as near as Irish ever comes to the infinitive of the other European languages.

For the infinitive in Britannic dialects, which differs from Irish only in unimportant particulars, see Zeuss-Ebel, Gr. Celt. 534 ff.

§ 1097. In Germanic there used to be in prehistoric times a noun with the suffix *-ono-* used in the accusative case as an infinitive; e. g. Goth. *itan* O.H.G. *ezzan* 'to eat' = *\*ed-ono-m*, Goth. *aihan* O.H.G. *eigan* 'to possess, own'. These come very near the Skr. *ádana-m* neut. 'an eating', and Irish infinitive-nouns such as Mid.Ir. *blegon* 'a milking'. See II § 67 p. 153.

§ 1098. Balto-Slavonic. (1) *-ti-* forms the infin. stem in Lithuanian, where the infinitive ends with *-ti* or *-tė*, and in Old Church Slavonic, which has *-ti*; e. g. Lith. *dė-ti dė-tė*, O.C.Sl. *dě-ti* 'to place, lay'. There are also Lith. inff. in *-tė*

(loc.), as *dektè dēga* 'it burns fiercely' (cp. Leskien, *Bildung der Nomina im Lit.*, 404). See § 1088. 6.

(2) The Suffix *-tu-* occurs in the Supines Lith. *dētū* i. e. *dē-tū* (cp. opt. 1<sup>st</sup> pl. *dētum-bime*) O.C.Sl. *dě-tū* (acc.) and O.C.Sl. *dětu* (loc.), beside which observe Pruss. acc. *dā-tun* *dā-ton* and dat. *dā-twei* 'to give' used in the ordinary infinitive way (the more usual ending for this meaning is *-t*, as *dā-t*). See § 1088. 7.

(3) A verbal substantive in *-ě* is seen in O.C.Sl. *vidě-achū* 'I saw'. See § 903 p. 452.

## 2. VERBAL ADJECTIVES.

§ 1099. As already explained, no clear line can be drawn between Verbal Adjectives (Participle, Gerundive) and other Adjectives. I mention first such suffixes as are found in more than one language with verbal adjectives.

(1) *-to-*, part. perf., mostly passive. \**dho-tó-s* 'placed, laid': Skr. *-dhitá-s hitá-s* Gr. *θετό-ς* Lat. *crēditu-s* Lith. *dėta-s*. Mid.Ir. *do-breth* 'datum est' Skr. *bhṛ-tá-s* 'borne'. Goth. *vāuhr-t-s* Avest. *varš-ta-* 'done'. O.C.Sl. *žę-tū* 'cut, mown' Skr. *ha-tá-s* 'struck, killed'. See II § 79 pp. 218 ff., § 140. 3 and 4 p. 452 f.

(2) *-no- -eno- -ono-*, part. pret., mostly passive. Skr. *pūr-ṇá-s* 'filled', Alban. *ṭene* (Gegian dialect *ṭan*) 'said' for \**ṭons-no* (G. Meyer, *Kurzg. Alban. Gramm.*, p. 42 f., *Alban. Stud.* II 76, III 65 f.), O.H.G. *gi-tān* 'done' O.C.Sl. *o-děnū* 'done again, turned over', A.S. *bund-en* O.Icel. *bund-enn* Goth. *bund-an-s* O.H.G. *gi-buntan* 'bound', O.C.Sl. *nes-enū* 'borne'. See II §§ 65—67 pp. 138 ff., § 140. 3 p. 452.

(3) *-iō-*, part. fut. pass. (Gerundive). Skr. *dṛś-ya-s dārś-īya-s* 'conspiciendus, visible, worth seeing', Goth. *un-qēp-s* 'inexpressible' O.Sax. *un-fōd-i* 'insatiate' (cp. also Gr. *ἀγ-ιo-ς* 'venerandus' Lat. *ex-im-iu-s* 'eximendus, remarkable'). See II § 63 pp. 123 ff., § 140 p. 452.

(4) *-teyo-*, *-tuyo-* *-tuyo-*, part. fut. pass. (Gerundive). Gr. *διωκ-τέo-ς* 'to be followed' for \**-τεfo-ς* (Hesiod *παρείo-ς* for

\**φα-τεf-ιο-ς*?), Skr. *kar-tavyà-s* 'faciendus' (implies \**kar-tava-*, cp. inf. in *-tavāi* § 1089.16 p. 601), Skr. *kár-tva-s kár-tuva-s* 'faciendus'. See II § 61 p. 116, § 63 p. 127, § 64 p. 135, § 140 p. 452.

(5) *-lo-*. Armen. part. aor. act. and pass., *gereal* 'capiens', *captus* from *gerem* 'capio', O.C.Sl. part. pret. act. II *nes-lū* 'having borne'. See II § 76 p. 212, § 140 p. 451.

(6) *-ent- -nt-*, part. pres., aor., and fut. act. Skr. *bhārant-* Gr. *φέρων* Lat. *ferēns* Goth. *batrand-s* O.C.Sl. *bery* 'ferens', Lith. *vėžąs* 'vehens'. *s*-Aor. Skr. *dhák-ṣ-at-* 'burning', Gr. *πέψας* 'cooking'. *sjo*-Fut. Skr. *dā-syá-nt-* Lith. dial. *dū-sius* for \**sians* High Lith. *dū'sęs* Gr. *δώσων* 'daturus'. See II §§ 125 f. pp. 394 ff., § 140 p. 451, IV § 491 p. 50 footnote.

(7) *-ues-* part. perf. act. Skr. *ririk-vás-* Gr. *λελοιπ-ώς* Lith. *likęs* 'having left', O.C.Sl. *mlŭz-ŭ* 'having milked'. See II § 136 pp. 438 ff., § 140 p. 451.

(8) *-meno- -mono- -mno-*, part. mid.-pass. Pres. Skr. *yāja-māna-s* Avest. *yaza-mna-* Gr. *αἰζό-μενο-ς* from √ *jaḡ-* 'honour', Pruss. *po-klausī-manas* (ī) nom. pl. fem. 'being heard'. Fut. Skr. *dā-syá-māna-s* Gr. *δω-σό-μενο-ς* from √ *dō-* 'give'. Perf. Gr. *δε-δό-μενο-ς*. The suffix *-ana-*, which replaces this in Sanskrit with unthematic stems, e. g. pres. *dā-dh-āna-s* perf. *riric-ānā-s*, may perhaps come from \**-ṃno-*. See II § 67 Rem. p. 152, § 71 pp. 163 ff., § 140 p. 451.

#### § 1100. Aryan.

(1) *-to-*, part. perf. mostly passive. Skr. *kṛ-tá-s* Avest. *ker'-ta-* O.Pers. *kar-ta-* 'made', Skr. Avest. O.Pers. *i-ta-* 'gone'. See § 1099.1.

(2) *-no-*, in Sanskrit, beside *-to-*, as *pūr-ná-s* = *pūr-tú-s* 'filled', *bhinná-s* 'split'. See § 1099.2.

(3) *-jo-*, part. fut. pass. (Gerundive), Skr. *dṛś-ya-s* *dārś-ya-s* Avest. *dar's-ya-* 'conspiciendus, visible'. See § 1099.3.

(4) Skr. *-t-ya-* instead of *-ya-* (3) when the root ends in a short vowel, as *kṛ-tya-s* 'faciendus'. See II § 63 p. 123. Cp. infin. *i-t-yāi* beside *bhuj-yāi* § 1089.12, 14 pp. 601 f.

(5) Skr. *-ay-ya* *-ay-ya-*, part. fut. pass., based upon the

Infinitive in *-ay*, as *śravāy-īya-s* 'laudandus, praiseworthy'; next we have *stuṣṭēyīya-s* 'celebrandus, praedicandus' based upon the Infin. *stu-ṣ-ē* (§ 1089. 2 p. 599). Cp. Mod.H.G. *der zu lobende, ein zu lobender* from *zu loben*.

(6) Skr. *-tva- -tuva-* and *-tavya-*, part. fut. pass., *kār-tva-s* *kār-tuva-s* and *kar-tavyā-s* 'faciendus'. See § 1099. 4.

(7) Skr. *-anīya-*, part. fut. pass., derived from nomina actionis in *-ana-m* (II § 67 p. 150), as *karānīya-s* 'faciendus' from *karāna-m* 'a making', cp. *gṛhamēdh-īya-s* adj. of *gṛhamēdhā-s* 'house offering', *tṛt-īya-s* 'tertius' (II § 63 p. 122). These gerunds did not grow common until the later period.

(8) Skr. *-ēnya- -ēniya-*, part. fut. pass., as *dyśśēniya-s* 'conspiciendus', from an *s*-aorist *yās-ēnya-s* 'cohibendus'. A suggestion may be offered that this form comes from the infin. with *-ē*; compare the remarks on *-na-* as a secondary suffix in Sanskrit, vol. II § 66 p. 142.

(9) *-ent- -nt-*, part. pres., fut., and aor. active. Skr. *s-ánt-* Avest. *h-ant-* 'being', Skr. *vāha-nt-* Avest. *vaza-nt-* 'vehens', fut. Skr. *vak-ṣyā-nt-* Avest. *vax-ṣya-nt-* from *vac-* 'to speak', *s*-aorist Skr. *dhák-ṣ-at-* from *dah-* 'to burn'. See § 1099. 6.

(10) *-o-*, part. pres. active. Skr. *pra-mṛṇá-s* 'destroying' with indic. *-mṛṇá-ti*, Avest. *per'sō* 'asking' with indic. *per'sa-iti*. See III § 198 p. 78.

(11) Skr. *-u-*, part. pres. active of *s*-Desideratives (§ 667 pp. 198 ff.), as *dipsú-ṣ* 'wishing to hurt' beside indic. *dīpsa-ti*, and from verbs in *-āya-ti* (§ 794 pp. 326 ff., § 795 pp. 330 f.), as *bhājayú-ṣ* from indic. *bhājāya-ti*. See II § 104 p. 314. With the latter participles compare those from denominative verbs, such as *aśvayú-ṣ*. II § 105 p. 319.

(12) Skr. *-uka-*, part. pres. active, formed from *-u-* (11) with *-ka-*, as *śikṣu-ka-s* 'sharing' (specially common in the Brāhmanas). See II § 88 p. 264.

(13) *-ues-*, part. perf. active. Skr. *ci-kit-vás* Avest. *ci-kiṭ-wah-* beside indic. Skr. *ci-kēt-a* 'knows'. See § 1099. 7.

(14) Skr. *-tavant-*, part. perf. active, formed from *-ta-* (1)



with *-vant-*, as *kṛtá-vant-* 'factum habens, πεποιηώς' (cp. the unique Avestic (*vī*)-*ver'zda-vant-* = ai. *vṛddhá-vant-* from *vardh-* 'to help, exalt'). See II § 127 p. 406, Bartholomae, Stud. zur idg. Sprachg. I 14 ff.

(15) Skr. *-māna-* Avest. *-mana-* *-mna-*, part. mid.-pass. with thematic stems. Pres. Skr. *bhāra-māna-s* from *bhar-* 'to bear', Avest. *bar'ze-mana-* *bar'ze-mna-* from *barz-* 'to raise oneself, be high'. Fut. Skr. *yak-ṣyá-māna-s* from *yaj-* 'to honour' Avest. *var'sya-mna-* from *varz-* 'to work'. See § 1099. 8.

(16) Ar. *-āna-*, part. mid.-pass. with thematic stems. Pres. Skr. *dā-dh-āna-s* Avest. *da-ḥ-āna-* beside indic. Skr. *dā-dha-ti* 'places'. Perf. Skr. *ja-gm-ānā-s* from *gam-* 'to go', Avest. *vāver'z-āna-* from *varz-* 'to work'. The ground-form of this *-āna-* is doubtful. See § 1099. 8.

#### § 1101. Armenian.

(1) *-lo-*, part. aor., e. g. *gereal* 'capiens, captus', from the ̣-Aorist *gerēeal* (§ 905<sup>a</sup> p. 453). See § 1099. 5.

(2) *-aul* (later *-ōl -ol*) forming nomina agentis and part. pres. act., e. g. *geraul* 'captor, capiens'. Bugge, Idg. Forsch. I 437 derives *-aul* from Idg. *-a-tro-* (II § 62 pp. 118 ff., § 119 pp. 376 ff.).

(3) Two part. fut., both with active and passive meaning, are made from the infinitive in *-l + -i* and *-oç*, as *gereli* and *gereloç*.

#### § 1102. Greek.

(1) *-to-*, part. perf., mostly passive (but generally used as adj.) and gerundival (expressing capacity, possibility, or the like, II § 79 p. 220); e. g. *δρα-τό-ς* 'skinned', *λυ-τό-ς* 'capable of being set free'. See § 1099. 1.

(2) *-tēmo-*, part. fut. passive, as *διωκ-τέο-ς* 'fit to be pursued'. See § 1099. 4.

(3) *-ent-* *-nt-*, part. pres., aor., and fut. active, as *λείπω* *λείπων* *λείψας* *λείπων* from *λείπω* 'I leave'. See § 1099. 6.

(4) *-mes-* (*-met*), part. perf. active, as *λε-λοιπ-ώς*. See § 1099. 7.

(5) *-meno-*, part. mid.-pass. from any mid.-pass. indicative; *λειπό-μενο-ς* *λιπό-μενο-ς* *λειψά-μενο-ς* *λειψό-μενο-ς* *λε-λειμ-μένο-ς*. See § 1099. 8.

§ 1103. Italic.

(1) *-to-*, part. perf., mostly passive (for the use of this participle with deponents see II § 79 p. 219 f.). Lat. *scrip-tu-s*, Umbr. *screihtor* pl. 'scripti' Osc. *scriftas* pl. 'scriptae'. See § 1099. 1.

(2) Lat. *-turo-*, part. fut. active, as *datūru-s*. Possibly developed out of the inf. in *-tūrum*. See § 900 p. 448.

(3) Ital. *-endo-*, part. fut. passive (Gerundive.) Lat. *ferundu-s ferendu-s faciundu-s faciendu-s, juvandu-s, videndu-s*, Umbr. *an-ferener* gen. 'circumferendi' *pihaner* gen. 'piandi', Osc. *úpsannam* 'operandam'. In the explanation suggested in vol. II § 69 p. 161 f. (cp. Bartholomae, Stud. idg. Spr. II 96) I went far astray, chiefly because the Lith. participles in *-tina-s*, which I compared, are probably analogical and belong only to Balto-Slavonic (§ 1106. 3). Of the explanations which I have met with in the meantime, those of Thurneysen, Conway, and Dunn (for references see footnote to page 596) in my opinion none will do.

Remark. Weisweiler's investigations (for which see same page) make it extremely probable that 'something to be done' is really the original meaning of this Gerundive; and that the Gerund (which is not found in our records of Umbrian or Samnite) is a mere outgrowth of the gerundive, such a phrase as *virtūs colenda est* suggesting *colendum est* (similarly *patriae defendendae causā* suggested *dēfendendī causā*) as an impersonal construction with similar meaning (*colitur* = *cultio fit*, *cultum est* = *cultio facta est*, hence *colendum est* = *cultio facienda est*). And since the other Idg. languages, so far as we know, have nothing which we can compare with the suffix of the Italic gerundive, it becomes probable *a priori* that the gerundive grew up in Italy, and was based upon the infinitive of purpose, just as Mod.H.G. *der zu lobende, ein zu lobende* comes from *zu loben*, and Skr. *śravāy-īya-s* 'laudandus' from inf. \**śravāi* (§ 1100. 5 p. 102). On this I base the following conjecture.<sup>1)</sup>

1) This was written before I learnt that Pott (Et. Forsch. II<sup>1</sup> 239 and II<sup>2</sup> 517) and Schröder (Kuhn's Zeitschr. XIV 354) had already analysed *ferendus* into *feren-do-*, and that in the final part of it, *-do-*, they saw the Mod.H.G. *zu* (Engl. *to*). But their view of the first part of *feren-do-* is untenable.

In pr. Italic it was customary to combine the accus. infinitive in *-m*, such as Umbr. *fero(m)* *fašiu(m)*, with the postposition *\*dō* or *\*de* 'to' (cp. Lat. *en-dō indu*, *dō-nicum dō-nec*, Avest. *vaesman-da* 'to the house', Gr. *ἡμέτερον-δε ἡμέτερον δῶ*, O.Ir. *do* 'to' A.S. *tō* O.H.G. *zuo* and *zi* 'to', see III § 223 Rem. 3 p. 102, Fick, Wtb.<sup>4</sup> 457), the combination meaning the same as our *to* with the infinitive. *-md-* must have become *-nd-* in pr. Ital. (cp. O.Lat. *quan-de* Umbr. *pane* and the like, I § 207 p. 174); this isolated the inf. + postposition from the ordinary inf. in *-m*. Then these forms ending with *dō* or *de* were made the foundation for derivative adjectives in the *o*-declension, on the same principle as *subjugu-s*, *anteno-vissimu-s*, *perfidu-s* come from *sub jugō*, *ante novissimum*, *per fidum* (II § 15 p. 31, § 35 p. 62).

The explanation of the forms *plendu-s videndu-s flandu-s arandu-s* depends upon our view of the Umbr.-Samn. infinitive (Osc. *fatium* 'fari' *censaum* 'censere' Umbr. *stiplo(m)* 'stipulari' — *-o(m)* contracted from *-ā-om*). Firstly, these may be transformations of *-m* and *-ā-m* on the lines of the thematic conjugation. In view of all that has been said in § 487 p. 41 f. §§ 578 ff. pp. 118 ff., and of infin. forms like Avest. *dām* 'to place, give' (§ 1089.1 p. 599), *\*plē-m* *\*vidē-m* *\*flā-m* *\*arā-m* in the same sense as *plēre*, *vidēre* etc. would seem nothing strange. In Lat. *plendu-s arandu-s* Osc. *úpsannam*, then, we should see these older infinitive forms unchanged. For Lat. *rotundu-s* (beside *rota*) *rubicundu-s* (beside *rubicāre* *Rubicō* from *\*rubicō-*) it would be needful to assume inf. *\*rotō-m* *\*rubicō-m* (cp. *aegrō-tu-s*); *rotundu-s* for *\*rotōndo-s* like *latrunculu-s* for *\*latrōn-culu-s*. And the agreement in form between *arandu-s videndu-s* and part. pres. *arant- vident-*, whilst in *\*ferondo-s* (*ferundu-s*) the vowel did not agree with *ferent-*, produced very soon, indeed in pr. Italic, the re-formate *ferendo-s*. Secondly: it is possible that even in pr. Italic the Oscan forms *fatium censaum* existed, in the shape *\*-ē-jom* *\*-ā-jom* (cp. 1<sup>st</sup> sing. pres. in *\*-ē-jo* *\*-ā-jo*),<sup>1)</sup> and so there were also in use *-ē(j)on-do-* *-ā(j)on-do-* (cp. Lat. *faciundu-s* beside Umbr. *fašiu(m)* 'facere'). Then the relation of *\*ferondo-* to the participial stem *\*feront-* (cp. *eunt-* etc. II § 126 p. 401) produced not only *ferendo-* following *ferent-* but also *arando- videndo-* following *arant- vident-*. In this case a simple explanation is possible for *rotundu-s rubicundu-s*.<sup>2)</sup> They would go with *rotāre rubicāre*, and would come regularly from *\*rotā(j)ondo-* *\*rubicā(j)ondo-* through the intermediate stage of *\*rotōndo-*

1) This would allow a simple explanation for Umbr. *subocau* in the formula *sobocau suboco* 'I entreat entreatingly'. It would be inf. like Lith. *deklė* in *deklė dēga* 'it burns up bright' (cp. § 473 Rem. p. 17 f.). But it would be perhaps not acc., for *\*-ā-jo-m*, but instr., for *\*-ā-jo* ('with weeping'). For the ending of the 1<sup>st</sup> sing. *subocau* see § 980 p. 520.

2) What is gained by connecting the group in *-cundu-s* with the Greek *κ-*perfect I cannot see (cp. Weisweiler, p. 41; Johansson, Beitr. Gr. Spr., 91 f.).

\**rubicāndo-* (cp. 1<sup>st</sup> sing. *rotō* for \**rotā-(i)ō*) — *rotundus* would mean 'that which goes rolling, rollable'. These then will have kept the older form of the infinitive more exactly than *rotandu-s rubicandu-s*, because they so soon became simple adjectives.

Of these two explanations I prefer the second.

The Lat. adj. in *-bundu-s* cannot be directly connected with the *b*-future, as is shewn by *furibundu-s* (beside *furere*) *pavibundu-s* (beside *pavēre*) and like forms. If we are not to start from nouns with the suffix *-bho- -bhā-* (II § 78 pp. 216 ff.), the best thing is to suppose that they are compounds containing *-bhū-o-* (from *√bhuy-* 'to be come, be', cp. Skr. *ā-bhū-a-m*). We then compare the Skr. *vāha-dhyāi* and similar compounds (§ 1089. 12 p. 600).

(4) *-ent- -nt-*, part. pres. active. Lat. *prae-sēns* Osc. *prae-sentid* 'praesente', Lat. *sedēns* Umbr. *zeřef serse* 'sedens'. See § 1099. 6.

(5) The part. perf. active with *-ues-* must have been living in Umbro-Samnite, because it was used to make the future perfect, as Umbr. *dersicust* 'dixerit'; cp. also Osc. *sipus* 'sciens'. See II § 136 p. 445, IV § 872 p. 421, § 1099. 7. p. 606.

#### § 1104. Keltic.

(1) The *-to-* of the part. perf. (passive), which is contained in the pret. passive, e. g. Mid.Ir. *do-breth* 'datum est', was exchanged for *-te -the*, which consist of *-to-* + *-io-*; e. g. O.Ir. *brúthe brethe* 'brought'. Cymric had in place of *-to-* the ending *-(e)tic* i. e. *-t-ico-*. See II § 79 p. 232 f., IV § 1099. 1.

(2) O.Ir. *-ti -thi,*<sup>1)</sup> part. fut. passive ("participle of necessity"); e. g. *messi* 'iudicandus' *carthi carth<sup>i</sup>* 'amandus'. Mod.Cymr. *cara-dwy* Cornish *cara-dow*.

Remark. The last who has discussed this participle is Ascoli (*Sprachwiss. Briefe*, 76 ff.); but he comes to no definite conclusion. Thurneysen writes: "I know no plausible explanation. Ir. *-thi* admits of no ending with orig. *-os* or *-ā*. British has for final the diphthong which has developed in stem-syllables from *ei* (or from *ē* in borrowed words), e. g. O.Bret. *in-aatoe*, a gloss, 'ineundum' (*√ag-*) Mod.Cymr. *caradwy* 'amandus'. The suffix perhaps originally had *ā* before the dental even in primary verbs, cp. Brit. \**aga-toi*, Ir. *bethi* for \**biathi* 'to cut' beside part. passive *búthe* (this word *bethi* I have wrongly explained in Kuhn's *Zeitschr.* xxxi 92), *for-canti* 'to teach' for \**-canathi*. Its

1) The supposed ending *-ti -thi* is due to a scribe's blunder, *dénti* 'faciendum' being written *dénti*.

connexion with the stem of the part. passive, which came about in Irish with primary verbs, must then be secondary; it is not carried out in Old Irish. We should arrive at something like *\*-ateivis* as the original ending."

### § 1105. Germanic.

(1) *-to-*, part. perf., mostly passive, in Weak Verbs and those Strong ones which had a weak preterite (§ 907 p. 454). Goth. *salbō-p-s* O.H.G. *gi-salbō-t* 'anointed', Goth. *vaúrh-t-s* O.H.G. *gi-worht -woraht* 'worked'. See § 1099. 1.

(2) *-no- -eno- -ono-*, with the same function as *-to-* (1), only in Strong Verbs. O.H.G. *gi-tān* 'done', O.H.G. *bund-en* O.Icel. *bund-enn* Goth. *bund-an-s* O.H.G. *gi-buntan* 'bound' (II § 65 p. 138, § 67 pp. 151, 153). See § 1099. 2.

(3) *-jo-*, part. fut. passive, seems established for the earlier periods of Germanic as a participial suffix, e. g. Goth. *un-qēþ-s* 'inexpressible', O.Sax. *un-fōdi* 'insatiate'. See § 1099. 3.

(4) *-nt-*, part. pres. active. Goth. *kiusa-nd-s* O.H.G. *chiosanti* 'trying, choosing' (II § 126 p. 402). See § 1099. 6.

### § 1106. Balto-Slavonic.

(1) *-to-* part. perf., mostly passive. Living in all classes of verbs in Lithuanian, as *sūk-ta-s* 'turned'. In O.C.Sl. however its use is circumscribed; an example of it is *īč-tŭ* 'chopped, hewn, mown' (II § 79 p. 236). See § 1099. 1.

(2) *-no- -eno-*, with the same function as *-to-* (1), and in O.C.Sl. much the commoner; e. g. *danŭ* 'given' *nes-enŭ* 'borne, carried' (II § 67 p. 151, 154). See § 1099. 2.

(3) A part. fut. passive is formed in Lithuanian and Slavonic from the part. in *-to-* (1), and in Slavonic from that in *-no- -eno-*, the further suffix used for this purpose being *-yno-* Lith. *-ina-* O.C.Sl. *-ino-*; e. g. Lith. *sūk-tina-s* 'fit to be turned' O.C.Sl. *pri-jetŭnu* 'acceptable, pleasant', O.C.Sl. *ne-iz-d-reč-enŭnŭ* 'inexpressible'. On consideration of what Leskien says in his *Bildung der Nomina im Lit.*, 255 f., I now believe that the comparison of Lith. *-tina-* with the O.Pers. infin. in *-tanaiy* and the Lat. gerundive in *-ndo-* (II § 69. 2 pp. 161 f.) must be given up.

(4) O.C.Sl. *-lo-*, so-called part. pret. active II, e. g. *nes-lŭ* in *neslŭ jesmŭ* 'I have borne' (§ 903 p. 452). See § 1099. 5.

(5) O.Preuss. *-mana-*, part. pres. passive: *madlas poklausimanas ast* 'the prayers are heard'. See § 1099. 8.

(6) *-mo-*, part. pres. passive in Baltic and Slavonic; also part. fut. passive in Baltic. Lith. *vėža-ma-s* O.C.Sl. *vezo-mŭ* 'being carried', Lith. fut. *vėdzi-ma-s*. Add the so-called Lith. part. pres. active II in *-da-ma-s*, as *sūk-dama-s* 'turning', which is closely connected with the imperf. *-davau* (§ 908 p. 455) and must originally have been middle (deponent). Compare Umbr. *persnih-mu* 'precamino', II § 72.1 p. 166.

(7) *-ent-* *-nt-*, part. pres. and fut. active. Lith. *vėžās* O.C.Sl. *vezy* 'vehens', Lith. fut. dialectic *vėszius* for *\*veszians*, High-Lith. *vėszės* (O.C.Sl. *bysąšteje byšęšteje* 'futurum, τὸ μέλλον'). See § 1099. 6.

(8) *-ues-*, part. perf. active. Lith. *milž-ęs* O.C.Sl. *mlŭz-ŭ* 'having milked'. In Lith. also in the so-called part. imperf. act. in *-davęs*, belonging to the indic. in *-davau* (§ 908 p. 455). See § 1099. 7.











